KDI-OECD Joint Conference on Korea's Social Policy Challenges

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한국의 사회정책 과제

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국문 보고서 요약

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“한국의 소득불평등: 추세와 주요 현안 과제”

KDI 재정·사회정책연구부
최 경 수

□ 한국의 소득불평등은 1992-2009년간 매우 크게 확대되었음.

○ 시장소득 지니계수는 1992년 0.254에서 2009년 0.320으로, 가처분 소득 지니계수는 0.245에서 0.295로 증가하였음.

○ 시장소득과 가처분소득의 차액은 조세 및 사회보장 이전지출로서 그 비중은 1992년 3%에서 2009년 5%로 확대되었으며 이 기간 중의 지니계수 상승을 1/3 정도 축소시키는 기여를 하였음.

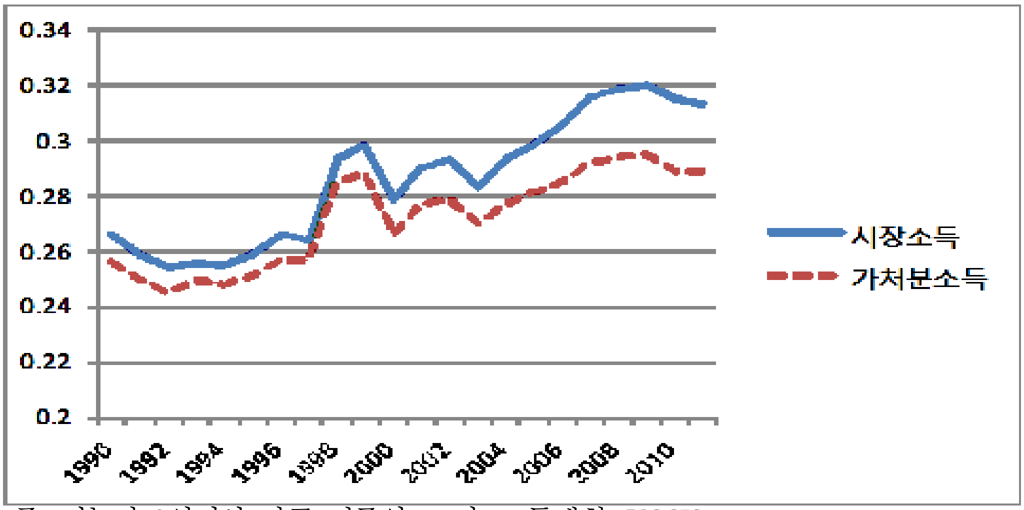
- 그럼에도 불구하고 시장소득 불평등을 낮추는 효과는 약 12%에 불과하여 약 1/3인 선진국에 비교하면 매우 작은 효과라고 할 수 있음.

- 한국의 조세/사회보장의 시장소득 불평등 시정효과가 작은 원인은 조세와 사회보장 지출 규모 모두가 유럽 국가들에 비하여 낮기 때문임.

- 선진국들의 경우 조세 및 사회보장의 불평등 완화 효과는 사회보장 지출보다는 주로 조세에 의하여 이루어지고 있음. 즉, 조세를 상위 계층에 집중하여 소득불평등을 줄이는 효과가 사회보장 지출에 의하여 불평등을 축소시키는 효과보다 크다는 의미임.

○ 한국에서 시장소득과 가처분 소득은 그 차이가 크지 않아 가처분 소득의 불평등은 시장소득의 불평등 확대에 의하여 야기되고 있음. 따라서 본문에서는 시장소득의 불평등 추세에 대해서 논의함.

[그림] 시장소득과 가처분소득 지니 계수 추이: 1990-2010



주: 비농가 2인이상 가구 기준임. 자료: 통계청, KOSIS

□ 한국의 20년에 걸친 시장소득 불평등 확대의 추세와 규모는 다른 OECD 국가들에 비교하여 매우 예외적이라고 할 수는 없으나 시기적으로는 예외적임.

○ OECD 선진국들에서 시장소득 불평등의 확대는 1970-80년대에 일어난 현상이며 1990년대 중반 이후에는 더 이상 확대되지 않고 있음.

○ 규모로 볼 때 한국에서는 28% 확대되었으며, 이탈리아, 영국, 일본과 비슷한 규모임. 미국, 노르웨이에서는 20% 확대되었으며, 캐나다, 핀란드, 독일, 덴마크, 뉴질랜드 등에서는 15% 정도임. 다른 국가들은 이보다 낮은 수준임.

- 그러므로 한국의 불평등 상승은 OECD 국가 중에서 가장 높은 국가들과 비슷한 규모라고 할 수 있으며, 지속기간도 약 20년 정도로서 비슷함.

○ OECD 국가들의 사례를 볼 때 각종 사회복지정책과 조세 개혁은 소득불평등 확대가 빠르게 진행되는 동안 실현되었음. 이와 같은 추세로 판단할 때 한국에서 복지정책이 확대되고 있는 추세는 예외적이라고 할 수는 없음.

□ 소득구간별로 본다면 한국의 소득불평등 확대 추세는 중위-하위 격차가 중위-상위격차보다 빠르게 확대되었다는 점이 특징적이라고 할 수 있음.

○ 1990년대 초반에는 하위와 상위 격차가 모두 1.8이었으나, 2009년에는 상위격차는 1.9로 증가한 반면 하위 격차는 2.6으로 확대되었음.

- 하위 격차는 중위 50%/하위 10% 분위의 비율(D5/D1)이며, 상위 격차는 상위 10%/중위 50% (D9/D5)의 비율을 말함.

○ 이는 하위 10% (D1)는 1995-2010년간 실질소득 상승을 거의 경험하지 못하였으며 중위는 24%, 상위 10%(D9)에서는 30% 증가한 결과임.

○ 미국, 영국, 독일, 일본, 캐나다, 핀란드, 노르웨이, 이탈리아 등에서는 상위 격차가 확대되어 중간소득이 하락하는 형태로 소득불평등 확대가 진행되었으며 이와 비교한다면 한국의 소득불평등 전개양상은 조금 다르다고 할 수 있음.

○ 하위에서 한국의 소득격차는 소득분배가 불평등한 영국, 스페인, 그리스, 포르투갈과 비슷한 정도이며 미국보다는 작음. 상위의 소득격차는 소득격차가 큰 미국, 영국, 스페인, 그리스는 물론 일본보다 약간 낮은 수준이며 비교적 불평등도가 낮은 프랑스, 독일과 비슷한 수준임.

□ 인구구조 고령화의 영향은 아직은 크게 나타나지 않고 있음.

○ 가구주가 65세 이상인 고령가구를 제외할 때 때 소득불평등을 나타내는 지니계수는 약 4% 정도 축소되는데에 불과함.

□ 시장소득은 노동소득, 사업소득, 재산소득, 사적이전으로 구성되므로 불평등도 확대에 대한 각 소득의 기여도를 추정하여 소득불평등이 어느 부문에서

초래되었는가를 확인할 수 있음.

○ 가계소득의 구성은 2010년 노동소득이 72%, 사업소득(자영자 소득)이 23% 임.

- 1995년에는 노동소득이 63%, 사업소득이 32%로 자영업 쇠퇴와 더불어 사업소득의 비중이 크게 줄어들었음.

○ 2010년의 경우 시장소득 분배 불평등의 약 80%은 노동소득에 의하여 초래되었으며, 20%가 사업소득에 의하여 초래되었음.

- 우리나라 소득자료에서 재산소득은 1% 정도로 매우 낮게 포착되어 그 영향은 미미함.

○ 반면 1995-2010년간 소득불평등 확대는 거의 노동소득에 의하여 초래되었으며 사업소득의 기여는 거의 없는 것으로 나타남. 사업소득은 그 전체적인 규모만 줄어들었으며 소득분배를 크게 변화시키지는 않은 것으로 나타남.

○ 선진국들의 경우 시장소득 불평등 확대는 약 80%가 노동소득에 의하여, 그리고 사업소득(자영업소득)과 재산소득이 각각 10%의 기여를 한 것으로 분석됨.

○ 미국의 경우는 임금 불평등도의 확대, 특히 경영진 보수 지급 방법의 변경으로 인한 최상위층 임금의 확대에 의하여 소득불평등도가 증가한 것으로 분석됨.

□ 노동소득 분배의 불평등도를 측정하여 보면 노동소득의 불평등도는 1990년대 특히 1997년 경제위기 이후에 크게 확대되었으며 2000년대에는 확대추세가 멈추고 있는 것으로 나타남. (노동소득이 있는 인구만 대상으로 측정할 경우)

○ 2000년대 이후에 노동소득 자체의 분배 불평등도가 증가하지 않았음에도 불구하고 노동소득에 의하여 소득분배 불평등도가 증가하고 있는 이유는 일자리가 숙련도가 높은 근로자에게만 주어짐으로 해서 전체적으로는 중상위에 집중되기 때문임.

○ 노동소득이 있는 가구주의 소득분포를 살펴보면 2003-08년간에는 중상위층에서는 노동소득이 증가하였으나 하위층에서는 소득증가가 이루어지지 못하고 있는 것으로 나타남.

- 이와 같은 추세는 1990-95년간의 추세와는 다른 현상으로 당시에는 노동소득 분포의 변화가 없이 전체적으로 소득이 고르게 향상되었음.

□ 이와 같은 노동소득 분포의 변화는 노동소득 분배율(피용자 보수/순처분가능소득, NDI)이 증가하지 못하는 가운데에 일어났음.

○ 우리나라 노동소득 분배율은 1970년대 이후 지속적으로 상승하여 1993년 63% 까지 상승하였으나 이후 오히려 다소 하락한 이후 정체상태이며 2010년에도 59%에 머무르고 있음.

○ 선진국들에서는 노동소득은 1960년대와 1970년대에는 지속적으로 상승하였으나 1970년대 후반 이후에는 오히려 하락하였으며 그 하락 추세가 지속되고 있음.

○ 선진국들에서는 노동소득 분배율이 하락하는 가운데 노동소득의 분배 불평등도가 증가하였으므로 양자간에 연관관계가 존재한다고 고려되고 있음.

- 노동소득 분배율 하락이 노동소득 불평등 상승을 야기하는 수학적인 관계가 존재하는 것은 아니며 노동소득 분배율이 어떠한 양상으로 하락하는가에 따라서 소득불평등도는 달라질 수 있음.

- 그러나 노동소득 분배율을 하락시키는 요인이 어떠한 요인들인가를 생각해보면 이와 같은 요인들은 노동소득의 불평등도 높이는 요인으로 작용하므로 양자간에는 연관관계가 있을 수밖에 없다고 할 수 있음.

□ 학술적인 연구결과에 의하면, 노동소득 분배율은 생산에 소요되는 자본의 양일 많을수록, 유가 상승 등 교역조건이 하락할 경우, 노동절약적 생산기술의 진보에 의하여 하락하며, 그 외 (다소 근거가 취약하지만) 노동의 교섭력 약화, 고용조정 비용의 상승에 의하여 하락한다고 분석됨.

○ 생산에 소요되는 자본의 증가와 교역조건의 악화는 생산에 보다 노동 외에 보다 많은 다른 생산요소가 소요된다는 의미로서 당연히 노동에 귀속되는 소득은 작아짐.

○ 생산기술에 의하여 노동이 대체되면 소득분배율은 하락함.

○ 노동의 교섭력 약화는 임금을 하락시키며 고용조정 비용 상승은 고용증가를 저해하므로 노동소득 분배율을 줄이는 방향으로 작용함.

○ 이러한 분석결과는 역으로 노동소득 분배율을 높이는 방안을 제시하고 있음. 자본집약적인 생산보다는 지식집약적인 생산이 유리하며, 교역조건을 개선하기 위해서는 높은 과학기술, 문화수준, 생산기술과 같이 세계적으로 희소한 자원을 경제내에 보유할 필요가 있음.

○ 노동의 교섭력 강화와 고용조정 비용 하락이 경제전체의 노동소득 분배율을 상승시킬 수 있을 지는 사실상 불확실함. 양자는 이에 수반되는 다른 요인들의 변화를 감안하여야 하므로 그 효과는 명확하지 않음.

□ 이와 같은 요인들에 의한 노동소득 분배율의 하락은 특히 임금수준이 낮은 미숙련 인력에게 불리하게 작용하게 됨.

○ 생산에 보다 많은 자본이 소요되고 원자재 등 해외 수입에 보다 많은 지출이 필요할 때 생산자는 노동비용을 절감하려할 것이고 대체가능한 노동은 자본 등 다른 요소로 대체하고자 함.

○ 미숙련 인력은 숙련수준이 높은 인력보다 대체가 용이하므로 저임금의 미숙련인

력에 대한 수요가 줄어들게 되며 노동소득 분배를 불평등하게 함.

□ 이와 더불어 2000년대 들어 노동소득 불평등을 야기하는 중요한 요인은 법인사업체화의 경향으로서 이는 영세 자영업자의 위축과도 관련된 현상임.

○ 사업체 센서스에 의하면 2000-10년간 법인사업체 고용증가는 285.2만명이나 개인사업체 고용증가는 25.5만명에 불과함.

- 반면 1993-2000년간 고용증가는 각각 23.5만명, 65.9만명으로 그 규모가 크게 역전된 것임.

○ 개인사업체의 다수는 고용규모 1-4명의 영세업체로서 법인사업체화의 경향에 따라 영세업체의 고용증가는 2000년대에 크게 둔화되었음.

- 1-4인업체의 고용증가는 1993-2000년간 111.3만명이나 2000-10년간에는 42.4만명에 그쳤음.

표. 사업체 규모별 고용규모 (천명)

	전체	1-4	5–9	10–19	20-99	100-299	300-999	1000+
1993	12,245	3,538	1,240	1,072	2,603	1,225	1,048	1,519
2000	13,604	4,651	1,552	1,429	3,020	1,315	930	706
2010	17,647	5,075	1,841	1,894	4,321	1,961	1,345	1,211
1993-2000	1,359	1,113	312	357	417	90	-118	-813
2000-2010	4,043	424	289	465	1,301	646	414	504

○ 개인사업체를 운영하거나 고용된 근로자의 다수는 미숙련의 저임금 근로자로서 영세업체의 쇠퇴는 결국 그들에 대한 노동수요 감소를 의미함.

○ 법인사업체가 개인사업체를 대체하는 과정을 자세히 살펴보면 대형업체가 영세업체를 구축하는 경우도 있지만 5-9인, 10-20인 등 소규모 사업체가 보다 작은 영세업체를 대체하는 과정도 활발하게 진행되고 있음을 알 수 있음.

○ 선진국들에서도 자영업은 근로자들이 임금근로보다 선호하는 취업형태로서 창업을 막는 요인은 자본과 경영 지식(경험)의 부족임.

○ 그러므로 정책금융의 축소로 경제내에 자본이 공급되고 기업체 근무에 경험이 축적되어 경영능력을 갖춘 근로자가 양산될 때 법인사업체가 개인사업체를 대체하는 경향이 나타나는 것은 자연스러운 현상이며 선진국들에서도 이미 일어난 현상임.

○ 경제내에 자본과 지식과 같은 부존자원이 존재할 때 이를 조직하여 사업체화하는 경향은 당연히 나타나며 이와 같은 부존자원이 공급되는 한 사업체의 대형화 경향은 항구적이며 인위적으로 통제하기도 어려운 것임.

□ 사업체의 대형화 경향과 더불어 자영업이 위축되었으며 이는 가계소득에서 사업소득을 축소시키는 요인으로 작용하고 있음.

○ 가구주 사업소득의 분포를 살펴보면 2003-08년간에는 사업소득의 증가가 거의 없으며 사업소득의 수준과 분포는 제자리에 머물고 있음.

○ 반면 1990년대에는 경제위기에도 불구하고 사업소득은 증가세를 유지하였음.

○ 그럼에도 불구하고 저소득층에서 자영업에 종사하는 비중은 줄어들지 않고 있으며 이는 그들이 임금근로로 전환하는 것이 쉽지 않음을 시사함.

○ 1995년 이후 2010년까지 중상위층에서는 사업소득이 주소득원인 가구는 줄어들고 근로소득이 주소득원이 가구가 증가하였으나 하위층에서는 사업소득이 주소득원인 가구의 비중이 줄어들지 않고 있음.

○ 사업소득 가구들 중에서 소득분포를 살펴보면 사업소득 비중의 축소와 더불어 불평등도는 줄어들었음. 이는 여전히 최상위층에서는 사업소득 가구가 상당히 존재하지만 중간소득계층에서 사업소득 가구가 크게 줄어든 결과임.

□ 산업구조의 변화가 노동소득 분배율에 미친 영향을 살펴보면 산업구조의 변화 자체가 노동소득 분배율에 미친 영향은 매우 작은 것으로 나타남.

○ 제조업 고용의 감소가 소득불평등을 야기한 주원인으로 지목되고 있지만 제조업 자체의 생산비중은 경제위기 이후 오히려 증가하였으며 제조업 내에서의 노동소득분배율 하락이 보다 뚜렷하게 나타남.

○ 과거에는 제조업의 노동소득 분배율이 다른 산업보다 높아 제조업의 성장이 노동소득 분배율의 증가와 소득불평등 축소에 기여하였으나 최근에는 제조업의 노동소득 분배율과 다른 산업의 노동소득 분배율과의 차이가 거의 사라졌음.

○ 오히려 노동소득 분배율의 증가에는 교육과 보건/의료산업의 성장이 크게 기여하였음.

□ 노동소득분배율의 정체와 개인사업체의 쇠퇴로 가계부문소득이 국민처분가능소득(NDI)에서 차지하는 비중은 1997년 이후 크게 하락하였음.

○ 반면 비금융법인(기업체)과 금융법인에 귀속되는 국민처분가능소득의 비중이 크게 증가하였음.

○ 가계부분 소득비중의 하락은 노동소득의 비중이 증가하지 못하고 정체하는 가운데 가계의 소득원 중 자영업 소득에 해당하는 영업잉여 부분이 크게 축소됨으로써 초래된 것임.

○ 가계에 귀속되는 자영업 소득은 1970년대부터 감소추세가 이어져 왔으나 1990년대에는 자영업의 활성화로 하락 추세가 완만하다가 1997년 경제위기 이후 가속화되었으며 현재에도 진행 중인 상태임.

□ 이러한 부문별 소득비중의 변화로 자본계정에서는 비금융법인 부문의 순자산이 크게

증가하였으며 해외부문 자산이 크게 증가한 반면 가계부문의 순자산 증가는 크게 둔화되었음.

○ 1995년에는 국내 순자산 증가 100조원 중 가계부문의 자산증가가 49조원이었으며 비금융 부문은 14.5조원에 불과하였으나,

○ 2010년에는 국내 순자산 증가 225조원 중 가계부문은 31조원에 불과하며 비금융법인 부문이 103조원, 금융부문이 37조원 순자산이 증가하였음.

○ 해외부문의 순자산 증가도 28조원 규모에 달함.

□ 한국경제는 1997년 외환위기를 경험한 이후 수출을 크게 증가시켰으며 현재의 수출 구조는 노동소득을 증가시키는 방향이 아니기 때문에 노동소득 분배율 증가와 소득불평등 개선에는 오히려 불리하게 작용하였을 가능성이 있음.

○ 경제학의 비교우위 이론(헥셔-오린 정리)에 의하면 교역의 기회가 늘어날 때 자본이 상대적으로 풍부한 경제에서는 자본집약적인 상품 생산에 특화하게 되며 이 경우 경제내에 노동수요는 오히려 줄어들게 됨.

○ 과거와 달리 현재는 수출품목들이 자본집약적인 상품들로 구성되어 있기 때문에 수출의 확대가 노동수요를 제고하고 소득불평등을 개선하는 효과는 크게 줄어든 것으로 보여짐.

○ 외환위기 극복을 위한 외환보유고 확충 필요성에 의하여 수출이 촉진되고 내수가 위축된 과정은 소득분배에는 불리하게 작용하였을 가능성이 있음.

○ 해외 수요의 부진으로 인한 내수의 비중 확대는 소득분배에는 오히려 바람직하게 작용할 수 있을 것이라고 할 수 있음.

□ 장기적으로 노동소득 분배율과 소득분배를 개선하기 위해서는 교역조건이 개선되어야 하며 이를 위해서는 과학기술의 증진 등 세계적으로 희소한 자원을 국내경제가 갖추도록 노력하여야 함.

○ 세계화의 경향 속에서 원자재 가격 앙등, 국제경제의 심화 등 우리 경제가 새로운 성장원천을 갖추지 못할 때 교역조건은 계속 불리하게 전개될 수 있음.

○ 한국 경제는 과거에는 세계적으로 희소한 양질의 저렴한 노동력을 갖추고 있었으며 이후에는 자본의 동원, 새로운 시장 등 유리한 환경에 있었으나 이를 적절하게 유지하기 이해서는 과학기술에서는 주변국가에 대한 우위를 유지하는 것이 필요함.

○ 우리 경제는 산업기술 위주의 R&D에는 강점이 있으나 전반적인 교역조건 개선과 소득분배 향상을 위해서는 기초과학기술과 서비스업 기술에 대한 R&D 투자를 확대시킬 필요가 있음.

□ 영세업체의 쇠퇴는 항구적인 경향이나 경제의 효율에 영향을 미치는 범위에서는 구조

조정의 충격이 완화되는 것이 바람직함.

○ 법인사업체의 생성과 존속에 필요한 자본과 지식이 경제내에 지속적으로 공급되는 한 법인화, 대형화의 경향을 지속될 것이라고 할 수 있음.

○ 그러나 경제의 효율성과 직접적인 관련이 없는 부문에서는 그 구조조정 속도를 조정하는 방안이 소득의 형평성을 위해서는 바람직할 수 있음.

○ 어느 경제에나 비효율적인 부문은 존재하며 비효율성이란 생산에 많은 생산요소를 소요한다는 의미로서 소득분배를 위해서는 많은 노동이 소요되는 부문은 존치시킬 필요가 있다고 할 수도 있음.

□ 노동시장의 규제완화 개혁은 고용창출 효과를 가져오지만 상품시장의 규제완화 개혁과 맞물려서 진행되지 않는 한 노동소득 분배율을 낮출 수 있으므로 다른 부문의 개혁과 병행하여 진행하는 것이 필요함.

○ 일본의 경우 노동시장 유연화 개혁은 이루어졌으나 상품시장 개혁에 실패함으로 해서 노동시장에서의 근로자의 지위가 오히려 하락하였으며 소득분배가 악화되었다는 사실에 주목할 필요가 있음.

○ 노동시장 유연화 개혁은 노동의 공급과 수요를 활성화 시키는 정책이므로 상품시장에서의 경쟁 개선으로 노동수요를 늘리는 정책과 병행해서 실시되어야 그 효과를 충분히 거둘 수 있음.

< 국문요약 >

"고용취약계층의 고용촉진"

KDI 재정·사회정책연구부
황 수 경

1. 머리말

□ 한국은 70-80년대 경제개발 및 고도성장 과정에서 30-54세 남성 노동력을 중심으로 한 고용관행을 확립, 현재까지 근간이 유지돼옴.

□ 2000년대 이후 급속한 저출산・고령화를 배경으로 더 이상 남성 핵심노동력에만 의존하는 고용구조가 유지되기 어려움.

□ 향후 우리나라 노동시장은 청년, 여성, 고령자 등 다양한 조건에 처해있는 고용취약계층의 인력을 얼마나 적절히 활용할 수 있느냐에 달려있다고 할 수 있음.

○ 청년, 여성, 중고령자 등이 각각 직면한 고용문제의 근본 원인을 탐색하여 적절한 대응책을 강구하여야 함.

2. 청년층 고용정책 방향

1) 청년층 고용현황과 잠재실업의 문제

□ 우리나라의 청년층(15~29세) 실업률은 2011년 7.6%로 전체 실업률 3.4%보다 높지만, 청년층 실업률이 높은 것은 대부분의 국가에 공통된 현상이며, 오히려 우리나라 청년층 실업률은 OECD 국가들과 비교하면 상대적으로 낮은 수준임.

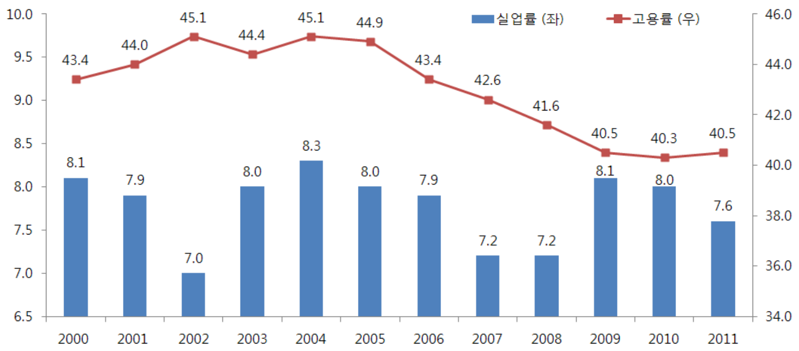
〈표 1〉 주요 OECD 국가에서의 청년층 실업률과 고용률(2010)

(단위: %)

	한국	프랑스	독일	이탈리아	일본	스웨덴	영국	미국
실업률	8.0	17.0	9.1	20.2	8.1	18.6	14.4	15.0
고용률	40.3	46.6	56.9	34.5	54.0	50.4	60.8	55.0

자료: OECD, Labour Force Statistics.

[그림 1] 청년층(15~29세)의 실업률과 고용률 (%)



□ 그러나 고용률로 보면, 청년층 고용률은 2011년 현재 40.5% 수준에 불과하고 2000년대 후반 들어 급격하게 감소 추세를 보임.

○ 청년층 고용률은 지난 6년 사이 무려 4.6%p가 하락하였고('04, 45.1% → '11, 40.5%), OECD 주요 국가들과 비교하면 10~20%p 낮은 수준

□ 우리나라 청년층에서 비경제활동인구 비율이 높게 나타나는 이유는 실업자로 파악되지 않는 잠재실업자, 이른바 '취업준비자'가 다수 존재하기 때문임.

○ 우리의 실업률 기준에 따르면 고시학원이나 직업훈련기관에 다니거나 혼자 취업준비를 하는 경우 구직활동으로 보지 않기 때문에 이들은 실업자가 아닌 비경제활동인구로 파악됨.

○ 취업준비자가 청년층 비경제활동인구에서 차지하는 비중은 8.1%에 달하며 특히 25~29세 연령층에서는 비경제활동인구의 25%를 점하고 있음.

○ 취업준비자는 2003년 이후 매우 빠르게 증가해왔는데, 시간이 지남에 따라 취업준비자가 누적되면서 취업준비기간도 점점 길어지는 양상을 보임.

〈표 2〉 비경제활동인구 중 취업준비자의 비율

(단위: %)

	2003	2004	2005	2006	2007	2008	2009	2010
청년층 계	5.0	5.8	6.9	7.9	7.8	8.4	7.8	8.1
15~19세	0.7	0.5	0.6	0.3	0.4	0.3	0.4	0.4
20~24세	8.4	10.2	11.8	13.5	12.1	13.0	12.0	13.6
25~29세	11.7	14.0	17.9	21.9	23.6	25.5	24.4	24.7

자료: 통계청, 「경제활동인구조사」 원자료

□ 취업준비자를 잠재실업자로 파악하여 확장실업률을 구하면 공식실업률의 2배가 넘는 것으로 파악됨(표 3).

○ 공식실업률 대비 확장실업률 배수는 2003~2010년 기간 중 1.6에서 2.1로 증가하여 공식실업률과 확장실업률 간 괴리가 점점 확대되는 추세임.

〈표 3〉 취업준비자를 포함한 확장실업률 추이

(단위: %)

	청년층		15～19세		20～24세		25～29세	
	UR	UR+	UR	UR+	UR	UR+	UR	UR+
2003	8.0	12.7	13.0	18.3	9.6	15.0	6.3	10.4
2004	8.3	13.4	14.1	18.2	9.9	16.0	6.5	11.0
2005	8.0	14.2	12.5	17.3	9.9	17.1	6.4	12.0
2006	7.9	15.4	10.4	14.0	9.9	19.0	6.5	13.4
2007	7.2	15.1	9.3	13.6	8.7	17.7	6.3	13.8
2008	7.2	15.8	10.2	14.3	9.2	19.6	6.0	14.1
2009	8.1	16.4	12.3	17.5	9.5	19.4	7.1	14.9
2010	8.0	16.7	11.9	16.4	9.5	20.7	7.0	14.7

주: UR 실업률, UR+ 확장실업률
자료: 통계청, 「경제활동인구조사」 원자료

2) 노동시장 진입 관행의 개편

□ 이상에서 살펴본 바와 같이, 우리나라 청년층 고용문제의 핵심은 청년층의 낮은 고용률과 긴 취업대기기간임.

□ 대학 진학의 증가로 고학력 청년층은 증가하고 있으나 이러한 노동력의 공급구조가 우리 경제의 일자리 구조와 부합하지 못하는 미스매치가 존재

○ 소수 양질의 일자리를 두고 과다경쟁이 이루어지다 보니 청년층 대기기간이 장기화되고 ‘스펙 쌓기’와 같은 비효율적인 투자가 확대

□ 청년층 고용문제는 일시적으로 추가적인 일자리를 제공하는 접근법에서 벗어나 중장기적 관점에서 구조적 대응책이 필요

○ 노동시장 인력수요에 부합하도록 공급구조를 개편하기 위한 대책 마련이 시급하며, 경쟁력 없는 대학의 구조조정을 포함, 교육시스템 전반의 개편이 필요

○ 대기업-중소기업 간 격차 완화 및 서비스업 선진화 등 양질의 일자리 확대

□ 입사시험 등에 의존하는 기존의 채용관행을 경력을 중시하는 방향으로 변화시켜 청년층의 인적자본투자가 효율적인 방향으로 전환되도록 유도하여야 함.

○ 과잉교육 억제를 위해 고졸자 채용기회의 대폭 확대

○ 공공부문 채용시 입사시험을 폐지하고 취업경력에 가산점을 부여하는 등 실질적인 능력개발의 인센티브 제공

○ 창의적 1인기업 창업 활성화와 초기정착을 지원하기 위한 기업가정신(Enterpreneurship) 고취 및 지원체계 구축

○ 그 외, 다양한 노동시장/취업 정보의 생산 및 제공, 현장실습 등 다양한 체험 기회 제공, 평가 및 선발과정으로서의 청년인턴제도의 활용 등을 통해 노동시장 진입 관행의 변화 모색

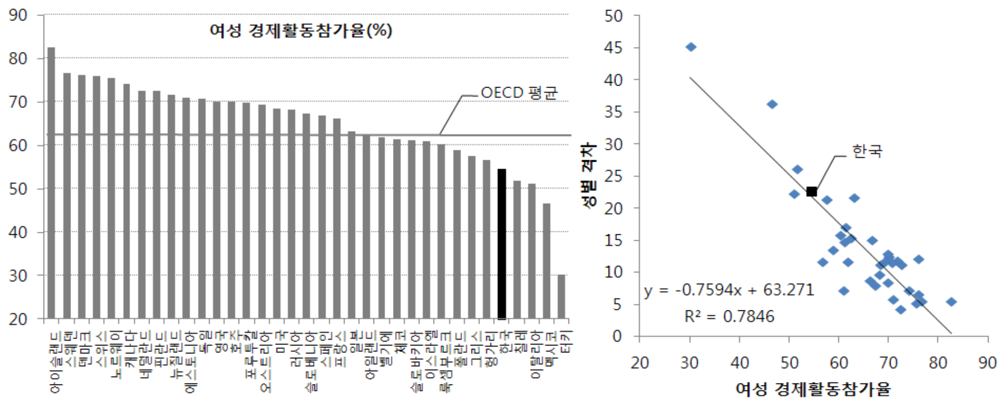
3. 여성 고용정책의 방향

1) 우리나라 여성고용의 현황과 문제점

□ 우리나라 15-64세 여성의 경제활동참가율과 고용률은 2011년 현재 각각 54.9%와 53.1%를 기록하여 OECD 국가 중 터키, 멕시코, 이탈리아, 칠레와 함께 최하위권에 머물고 있음.

○ 우리나라의 성별 참가율 격차는 점차 감소하는 추세를 보이고 있지만 아직도 23%포인트에 달하는 큰 차이를 보이고 있음.

[그림 2] OECD 국가의 여성 경제활동참가율과 성별 격차



자료: OECD, Labour Force Statistics, from OECD.stat

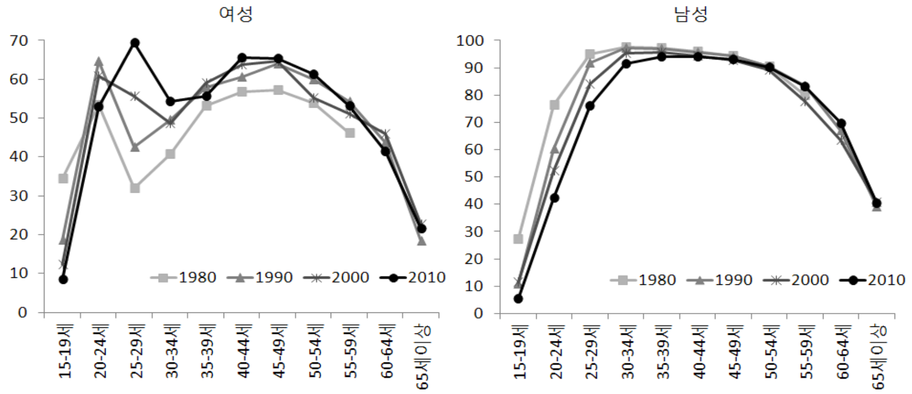
□ 우리나라 여성의 경제활동참가 패턴의 특징은 M자형 곡선으로 대표됨.

○ 여성의 연령대별 참가율은 20대 후반 또는 30대 초반에서 함몰되는 M자형 곡선의 형태를 취하고 있으며, 이는 20대 후반에 대부분 노동시장에 진입해 50대 초반까지 참가율 수준이 그대로 유지되는 역 U자형의 남성 참가율 곡선과는 뚜렷하게 구분됨(그림 4).

○ OECD 국가 중 우리나라와 일본만이 여성의 연령별 경제활동참가율 구조에 여전히 쌍봉구조가 남아있음(그림 5).

[그림 3] 성별 연령대별 경제활동참가율 추이

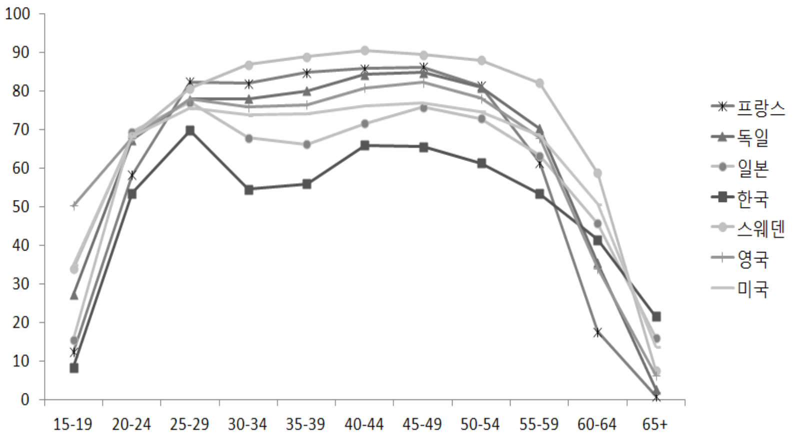
(단위: %)



자료: 통계청, 「경제활동인구조사」 각년도

[그림 4] 각국 여성의 연령대별 경제활동참가율 (2010)

(단위: %)



자료: OECD, Labour Force Statistics, from OECD.stat

□ 여성 참가율의 M자형 패턴은 여성이 출산과 자녀양육 부담이 집중되는 시기에 경제활동을 포기하게 됨을 의미함.

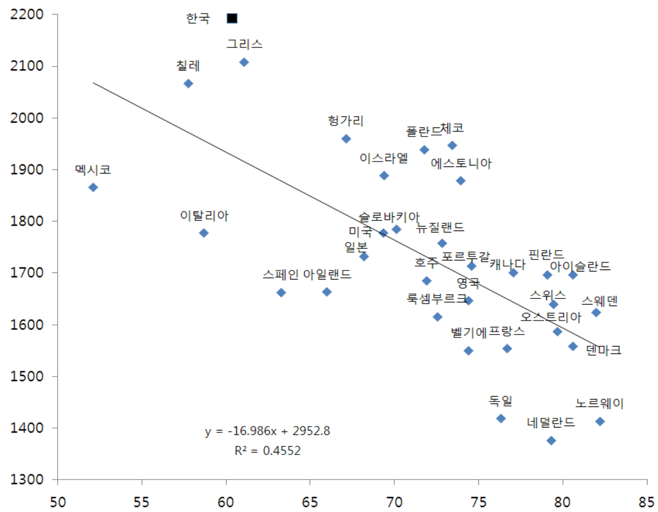
- ○ 그동안의 여성고용정책은 출산과 양육 부담을 덜어주는 데 초점을 맞춰 왔으나, 실질적으로 여성 30대 연령층의 참가율을 개선시킨 효과는 미미한 수준임.

2) 여성 고용과 일-가정 양립(Work-Life Balance)

□ OECD 국가들의 취업자 평균 연간근로시간과 여성(25-54세) 고용률의 관계를 보면, 근로시간이 긴 국가에서 여성 고용률이 낮게 나타남(그림 6).

- ○ 우리나라의 장시간 근로 환경은 기혼여성의 경제활동 참여를 제약하는 중요한 요인 중 하나로 지적될 수 있음(장시간 근로 하에서의 여성의 과소고용).

[그림 6] 연간근로시간과 여성(25-54세) 고용률 (2010) (단위: 시간, %)



자료: OECD, Labour Force Statistics, from OECD.stat

□ 생애주기별 여성 노동공급 패턴의 국제비교(EU, 2006; Anxo et al., 2007)

- <u>보편화된 2인소득자형 (스웨덴)</u>
- <u>여성 파트타임형 (네덜란드, 영국, 독일)</u>
- <u>약한 남성부양자형 (프랑스)</u>
- <u>풀타임-이탈 양자택일형 (스페인, 이탈리아)</u>

□ 어느 국가를 막론하고 자녀양육 부담이 집중되는 시기에 여성들은 시장노동시간을 줄이고 가사노동에 더 많은 시간을 할애하게 됨.

- 정도 차는 있지만 대부분의 국가에서 이러한 현상을 관찰되며, 국가 간에 뚜렷한 차이를 보이는 것은 자녀양육기에 경제활동을 지속하는지 아니면 그만두는지, 그리고 양육부담이 줄어든 시기에 노동시장에 다시 복귀하는지, 복귀한다면 어떤 근로시간 형태를 취하는지 등임.

□ 우리나라는 노동시장이 장시간 풀타임 고용 위주로 되어있고 이로 인해 가사부담이 집중되는 시기에 여성 상당수가 노동시장에서 이탈한다는 점에서는 스페인·이탈리아와 흡사

- 자녀양육기가 지나면서 여성 고용률이 부분적으로 회복되고 있다는 점에서는 프랑스와 유사
- 여성 취업자의 근로시간은 스페인·이탈리아보다 5-10시간 이상 길다는 점을 감안하면, 우리나라 여성의 경제활동참가 욕구는 상대적으로 높지만 노동시장 여건이 이를 충분히 뒷받침해주지 못하고 있음을 시사

3) 여성 고용률 제고를 위한 정책방향

□ 우리 사회는 여성 고용률 증대와 저출산 극복을 동시에 모색해야 하는 당면과제를 안고 있음.

○ 우리나라는 2000년대 고령화사회에 진입한 이래 출산율이 1.2 이하로 떨어지는 초저출산 현상을 경험하고 있으며, 그 결과 2017년 고령사회, 2026년 초고령사회에 진입하는 등 유래 없이 빠른 속도로 고령화가 진행될 전망

○ 이에 대한 정책대응의 관점에서, 출산휴가 및 공공보육시설 확충을 통한 양육부담 경감과 파트타임 고용 확대를 통한 일-가정 양립 지원이라는 두 가지 정책은 일정 정도 대체재 역할을 수행함.

○ 스웨덴, 노르웨이 등 북유럽 국가에서는 여성은 풀타임으로 근무하고 자녀양육 부담을 국가가 짐으로써 여성의 높은 경제활동참가율과 높은 출산율의 성과를 내고 있는 반면, 네덜란드는 파트타임을 활성화하기 위한 법・제도 개편을 단행하고 적극적인 근로시간 유연화를 통해 여성의 일-가정 양립을 꾀하고 있음(표 8).

〈표 4〉 서국 국가에서의 여성 경제활동참가율, 파트타임 비중, 육아지원, 출산율

(단위: %)

	참가율	파트타임비중	육아지원	출산율
스웨덴	77.7	19.0	4.0	1.6
덴마크	76.7	25.6	4.4	1.8
핀란드	73.2	14.9	1.5	1.7
영 국	70.3	38.8	-0.9	1.7
네덜란드	69.4	59.7	0.3	1.7
미 국	69.3	17.8	0.1	2.0
호 주	69.0	40.7	-2.6	1.8
독 일	68.5	39.2	-0.6	1.3
프랑스	63.9	22.9	1.7	1.9
스페인	61.1	21.4	-0.4	1.2
벨기에	58.9	34.7	1.2	1.7
이탈리아	50.8	29.4	0.4	1.3

주: 1) 여성 경제활동참가율은 2006년 15～64세 기준, OECD Employment Outlook 2007.
2) 파트타임 비중은 2006년 취업자중 파트타임 고용비중, OECD Employment Outlook 2007.
3) 육아지원은 육아지원의 적용범위와 모성급여보장을 지수화한 것으로 -5～5의 값을 가짐. Table 4.9, OECD Employment Outlook 2001.
4) 출산율은 2000～05년 합계출산율, World Population Prospects, UN 2005.

□ 우리나라에서 스웨덴, 미국 등과 같이 풀타임 고용을 위주로 하는 여성고용 확대를 추구할지, 네덜란드 등 중부 유럽에서와 같이 단시간근로를 통한 여성고용 확대를 추구할지는 중요한 정책적 선택의 문제

○ 우리나라의 경우 전형적인 남성부양자형 국가이며 여성이 육아 및 가사부담의 일차적

책임을 지고 있다는 현실을 감안할 때 단시간근로 및 재량근로의 확대가 효과적인 수단이 될 수 있을 것으로 판단

○ 우리와 사회문화적 배경 및 노동시장 구조가 가장 흡사하다고 할 수 있는 일본의 경우, 여성 파트타임 고용비중 30.5%, 고용률 67.6%로, 우리나라에 비해 파트타임 고용비중은 약 20%p, 고용률은 약 10%p 높은 수준

□ 정부는 근로시간을 줄이고 재량성을 높인 일-가정 양립형 일자리를 확대하는 방향으로 적극적인 정책적 노력을 강구할 필요가 있음.

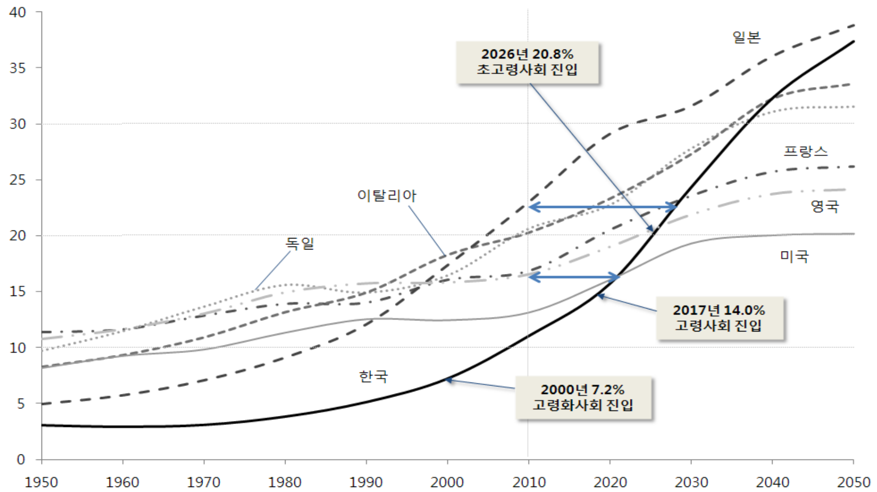
4. 중고령자 고용정책의 방향

1) 고령화와 노동시장 구조 변화

□ 우리나라는 2017년에 65세이상 인구 비율이 14%를 넘어서는 고령사회에 진입하고, 2026년에는 초고령사회로 진입하면서 30년 후면 여타 OECD 국가들의 고령화 수준을 뛰어넘어 일본과 함께 최고령 국가가 될 것으로 전망

○ 생산가능인구(15~64세)는 ’16년을 정점으로 감소할 것으로 전망되며, 핵심생산연령층(25~54세)은 이미 ‘10년부터 감소하기 시작

[그림 6] 주요 OECD 국가들의 고령화 추이



자료: OECD Employment and Labour Market Statistics (http://stats.oecd.org/)

□ 저출산·고령화가 급속히 진전되면서 노동시장에서 노동력의 연령별 구조도 크게 변화 (표 5)

○ 취업자 평균연령은 1982년 37.3세에서 2000년 40.3세, 2011년 43.7세로 가파른 상승세

○ 30-54세 핵심연령층을 중심으로 한 인력활용이 더 이상 가능하지 않을 것임을 시사

〈표 5〉 노동력(=경제활동인구)의 연령대별 구성

(단위: %)

	1963	1970	1980	1990	2000	2010	2011
15-29세	40.2	36.1	34.8	28.7	23.9	17.1	16.7
30-54세	51.2	54.6	54.9	58.0	61.2	63.7	63.2
55세이상	8.6	9.3	10.4	13.3	14.8	19.2	20.2
계	100.0	100.0	100.0	100.0	100.0	100.0	100.0

자료: 통계청,『경제활동인구조사』각 년도(구직기간 1주 기준) (KOSIS)

2) 고령자의 퇴직 및 은퇴 현황

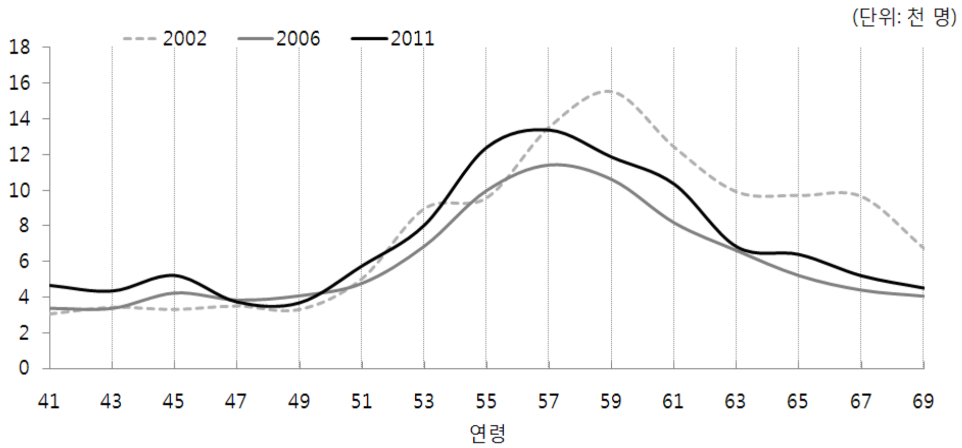
□ 2009년 노동부 실태조사에 따르면 300인 이상 사업장의 94.7%가 정년제(mandatory retirement)를 운용하고 있고 조사대상 기업의 약 80%가 국민연금 수급연령(60세) 미만의 정년을 설정하고 있음.

○ 기업들의 평균정년은 2009년 현재 57.2세이며 2000년 이후 현재까지 거의 동일한 수준이 유지되고 있음.

※ ‘00년 57.2세→’03년 56.7세→’06년 56.9세→’08년 57.1세→’09년 57.2세

○ 실제로는 1998년 경제위기 이후 구조조정이 상시화되면서 명예퇴직 및 조기퇴직이 일반화되어 실질적인 퇴직연령은 오히려 단축되는 경향(그림 7)

[그림 7] 정년퇴직/정리해고 등 비자발적 퇴직자의 연령별 분포(임금근로자)



주: 각 연령별 정년퇴직, 연로 또는 명예·조기퇴직, 정리해고 등을 사유로 한 이직자 수
자료: 통계청, 「경제활동인구조사」, 각년도 원자료

□ 우리나라 근로자의 평균 퇴직연령은 약 54세, 평균 은퇴연령은 약 68세

○ 즉, 우리나라 근로자는 주된 일자리 퇴직 후 평균적으로 약 14년간 제2의 일자리에서 노동생애를 보내고 있음.

○ 그러나 중고령자 노동시장이 자영업, 단순노무직 등에 한정되어 있어 경력과 기술에 맞는 일자리를 구하기 어려워 소득의 급격한 감소를 경험

○ 또한 퇴직금을 이용한 창업을 시도하는 경우가 많으나 성공가능성이 희박하여 막대한 재산상 손실을 경험하는 사례가 종종 발생하며 퇴직근로자의 노후생활을 심대하게 위협

□ 현재 국민연금 수급연령은 61세로, 평균적인 정년보다 높게 설정되어 정년제도와 연금제도간 부정합(연금공백, pension gap)이 존재

○ 향후 국민연금 수급연령은 매 5년마다 1년씩 연장되어 2033년에 65세가 될 예정이며, 따라서 정년과 연금수급 연령 간의 괴리는 더욱 벌어질 수 있음.

3) 고령자의 고용안정을 위한 정책 과제

□ 연금공백을 없애고 고령자의 고용안정을 기하기 위해서는 최우선적으로 지나치게 낮게 설정된 현재의 정년제도를 개편해야 함.

○ 시스템 실패를 보정하기 위해 정년을 연금개시연령 이하로 설정하지 못하도록 강제하여 정년제도와 연금제도의 정합성을 확보해야 함.

□ 고령근로자가 주된 일자리에서 더 오래 일할 수 있도록 하려면 고령자친화적 근로시간 및 근무형태가 마련될 필요가 있음.

○ 고령자 고용의 걸림돌로 여겨지는 노동강도, 장시간 노동의 환경을 개선하여 고령자친화적인 노동환경을 제공한다면, 고령자가 더 오랫동안 일-생활의 균형(work-life balance)을 달성하고 충분히 높은 생산성을 발휘할 수 있음.

○ 이를 위해 1) 점진적 퇴직을 위한 근로환경 개선사업 지원, 2) 근로자들의 근로시간 선택권 강화 및 정규직 시간제 활성화, 3) 퇴직 전 일정 시점부터 근로시간 조정이 가능하도록 근로시간 단축 청구권 도입, 4) 은퇴준비 교육 의무화 및 유급휴가 부여 등이 정책수단을 고려

< 국문요약 >

"외국인력정책의 현황과 과제"

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1. 국내 체류외국인 동향

□ 2004년 이후 외국인 및 이민자의 수가 크게 증가하여 2012년 7월에 주민등록인구의 2.9%인 145만명을 넘음.

○ 체류외국인의 수는 특히 2004년 이후에 급격하게 증가하였으며, 이는 주로 결혼이민자, 외국인 유학생, 고용허가제로 입국하는 외국인근로자의 증가에 기인

○ 증가세는 금융위기 동안 잠시 정체되었으나, 2011년 한해에만 133,000명이 입국

○ 과거에 비해 출신국과 유형이 다변화

○ 체류외국인의 대부분인 85% 가량이 아시아 출신이며, 중국인이 48.6%로 가장 큰 비중 차지

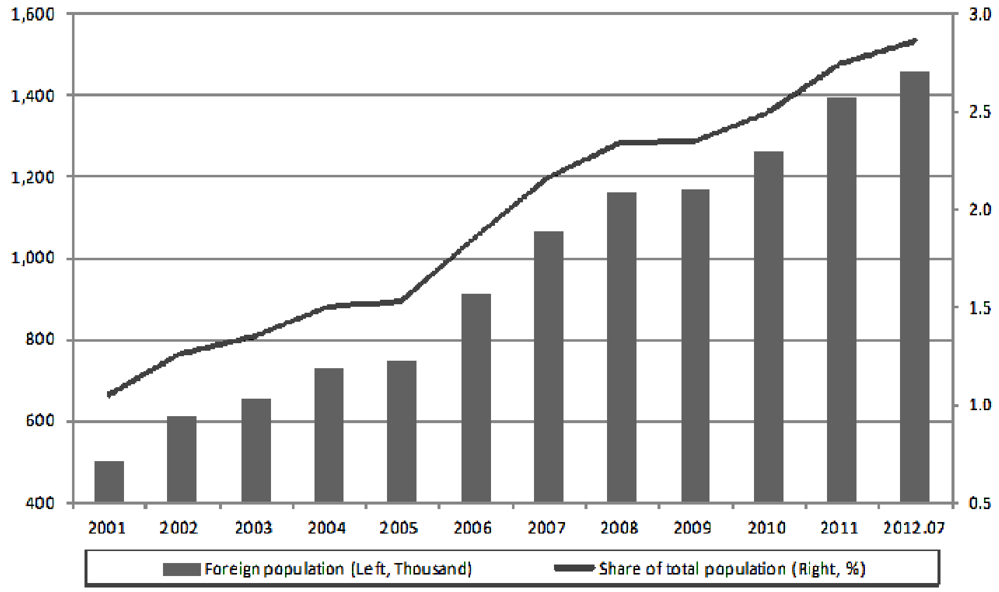
- 그 가운데 중국인이 2/3를 차지
- 불법체류율은 출신국별로 큰 차이를 보이며, 3%에서 30%까지 다양

[표 1] 체류외국인과 이민자의 수

연도	총계	결혼이민자	유학생	전문인력	비전문인력			기업투자
			D2 +D4	E1~E7	E9+H2	E9	H2	D8
2001	501,958	24,949	7,998	20,610	–	–	–	6,594
2002	609,797	34,710	11,308	24,155	–	–	–	7,178
2003	656,380	44,416	13,928	22,431	159,755	159,755	–	5,902
2004	728,339	57,069	19,966	21,729	165,198	165,198	0	6,041
2005	747,467	75,011	27,498	24,785	113,000	113,000	0	7,107
2006	910,149	93,786	42,289	29,011	161,867	161,867	0	7,300
2007	1,066,273	110,362	61,836	33,502	403,687	175,001	228,686	8,109
2008	1,158,866	122,552	75,587	37,304	490,109	190,777	299,332	8,356
2009	1,168,477	125,087	82,374	40,698	494,646	188,363	306,283	7,907
2010	1,261,415	141,654	107,409	43,608	506,905	220,319	286,586	7,557
2011	1,395,077	144,681	104,858	47,095	537,663	234,295	303,368	7,405

출처 : 법무부 출입국관리본부 통계연보

[그림 1] 한국의 외국인 총수. 불법체류자도 포함.



출처 : 법무부 출입국관리본부 통계연보

II. 외국인 근로자 정책

A. 전문인력

□ 전문인력으로 분류되는 비자 유형은 E-1(교수), E-2(회화지도), E-3(연구), E-4(기술지도), E-5(전문직업), E-6(예술흥행), E-7(특정활동) 등이 있음.

○ 이들은 출입국관리법상의 체류자격 요건을 만족하고 고용계약이 있으면 사실상 비자가 발급되며, 체류 및 출입국상의 다양한 혜택이 주어짐.

- 노동시장테스트가 면제됨.

○ 여러 혜택과 유치노력에도 불구하고 전체 외국인력 가운데 전문인력의 비중은 여전히 매우 낮으며, 상당수가 회화강사이거나 요식업 등 부가가치가 낮은 직종에 종사

○ 공학 분야 등에서 일정학력과 기술 등 자격요건을 만족시키는 이들을 유치하기 위해 도입된 Science card, Gold card 제도는 유치실적이 저조

B. 비전문인력

□ 중소기업의 인력난 해소를 목적으로 1993년에 도입되었던 산업연수생제도는 불법체류, 송출비리, 인권침해 등의 폐단 양산

○ 외국인을 근로자가 아닌 산업연수생의 신분으로 도입

○ 2003년 1월에 불법체류율이 80%에 달하는 등 폐단이 극심해지자, 정부가 대국민 공감대를 바탕으로 외국인 고용허가제를 도입하기로 확정하고 같은 해에 『외국인근로자의 고용 등에 관한 법률』을 제정

□ 2004년 8월에 외국인 고용허가제 시행

○ 고용허가제는 인력부족을 겪는 사업장에 외국인 근로자를 고용할 수 있도록 허가해주는 제도

○ 고용허가제는 산업연수생제도에 비해 다방면에서 개선된 제도임.

- 기업의 자율적 근로자 선택권 보장: 사전에 구직자의 기본적인 인적사항 확인
- 외국인 근로자의 선정·도입 절차의 투명성 담보: 국가간 양해각서 체결
- 외국인근로자의 권익보호: 내외국인간 차별금지 원칙
- 불법고용 및 취업유인을 최소화: 송출비리 근절

□ 2007년에 고용허가의 특례조항으로 동포를 위한 방문취업제 시행

○ 외국국적동포의 국내 취업 기회를 확대한 것으로, 사증을 발급받으면 입국 후자유로운 구직 및 취업활동이 가능

○ 일반 외국인근로자와 달리 서비스업종에서의 취업이 허용되며 사업장 이동에도 제한이 없는 것이 가장 큰 특징

III. 고용허가제

□ 비전문 외국인력의 도입규모는 매년 총리실 산하 외국인력정책위원회에서 결정하여 공고

○ 도입규모는 다시 업종별, 사증별로 구분됨.

○ 업종과 사업체규모에 따라 사업체별 외국인 고용상한비율이 설정되어 있음.

- 인력부족률에 따라 조정되기도 함.

□ 외국인근로자 고용허가 및 도입절차는 다음과 같음.

○ 사업주가 외국인 근로자 고용허가를 신청한 후, 14일간의 내국인 구인노력을 거쳐 인력부족확인서를 발급받음.

○ 고용부 산하 고용지원센터(직업안정기관)에서 외국인 구직자 가운데 3배수 이상을 선

별하여 추천하면 사업주가 학력, 경력, 국적 등의 기본정보를 바탕으로 적격자를 선택

○ 근로계약체결 및 사증발급후 외국인 근로자가 입국하면 취업교육을 받고 근로 개시

□ 외국인 근로자들의 법적 지위와 처우에 관한 사항은 다음과 같음.

○ 취업기간은 최대 3년이며, 취업기간이 만료되어 출국하기 전에 사업주의 신청이 있을 경우 1회에 한하여 추가적으로 1년 10개월의 재고용을 신청할 수 있음.,

- 최근 특별한국어시험제도, 성실근로자재입국제도 등으로 최장 10년 가까이 체류하는 것이 가능해짐.

○ 가족동반은 원칙적으로 불가능

○ 외국인근로자들은 「근로기준법」, 「산업안전보건법」, 「산업재해보상보험법」, 「최저임금법」 등 노동관계법의 차별없는 적용을 받음.

○ 외국인의 고용 등에 관한 법률에 따라 출국만기보험, 건강보험, 귀국비용보험, 임금체불보증보험 등의 적용을 받음.

- 연금은 상호주의원칙 적용

Ⅳ. 외국인 근로자의 고용구조와 노동시장 영향

A. 고용구조

□ 외국인 근로자들은 업종별로는 제조업과 서비스업, 그리고 사업체 규모별로는 4인이하 영세 사업체에 집중적으로 분포하고 있음.

○ 고용허가제 시행 초기에는 고용허가제 일반 외국인 근로자가 더 많았으나 2007년 방문취업제 시행 이후 동포인력이 빠르게 증가하여 고용허가제 일반 입국자를 초과

○ 업종별 분포를 보면 제조업이 전체 취업자의 77.2%로 가장 많은 비중을 차지하고 있고, 그 다음으로 서비스업(14.1%)이 뒤를 잇고 있음.

- 고용허가제 일반입국자는 91.1%가 제조업에 취업하고 있으며, 농축산업 취업자는 5.9%이고 건설업 취업자는 2.4%

- 특례 입국자는 취업 미신고율이 매우 높아 대표성에 한계가 있으나 이들은 일반적으로 제조업, 건설업, 음식숙박업, 가사간병서비스업에 종사하고 있는 것으로 알려져 있음.

<외국인 근로자 업종별 취업자수, 2007-2011>

산업	2007	2008	2009	2010	2011
제조업	119,411	147,494	154,335	167,353	190,391
건설업	207	1,825	4,841	12,777	9,234
농축산업	154	2,921	5,815	6,545	10,153
서비스업	24,121	23,153	24,108	35,388	34,741
어업	5	485	949	1,376	2,130
합계	143,898	175,878	190,048	223,439	246,649

<규모별 고용사업장 내 외국인 근무현황, 2012년 5월말 현재>

구분	1~4	5~10	11~30	31~50	51~100	101~200	201~300	301~500	501+	Total
계	40,200	46,619	75,898	33,488	25,176	15,286	4,164	1,334	307	242,472
일반	19,236	36,405	59,876	26,042	19,868	12,607	3,502	1,094	229	178,859
특례	20,964	10,214	16,022	7,446	5,308	2,679	662	240	78	63,613

B. 임금 및 근로실태

□ 외국인근로자의 월평균임금은 161.6만원으로 내국인근로자의 81.4%수준

○ 성별로 보면 외국인 남성근로자는 내국인 남성근로자 임금의 78.4%수준이며, 외국인 여성근로자의 임금은 내국인 여성의 89.8%

○ 체류자격 유형별로 보면 고용허가제 일반입국자의 임금이 163.8만원으로 방문취업입국자의 156.5만 원에 비해 약간 높음.

○ 업종별로 살펴보면, 제조업(167.9만원)-건설업(173.2만원)의 순으로 임금이 높고, 어업(119.5만원)이 가장 낮음.

<업종별 외국인근로자 임금. 단위: 천원>

	월급여	정액급여	시간당정액급여
전체	1,616	1,263	7.322
농축산업	1,233	1,168	8.139
어업	1,195	1,194	14.324
제조업	1,679	1,240	7.254
건설업	1,732	1,470	9.192
서비스업	1,392	1,359	6.17
음식점업	1,381	1,349	7.446
기타서비스업	1,520	1,409	6.935
개인 간병인 등	1,428	1,427	3.197
가구내 고용	1,352	1,341	3.223

<내외국인별, 성별, 사증별 월평균 임금수준(2011년)>

		월급여	정액급여	시간당 정액급여
국적	내국인	1,983	1,648	10.628
	외국인	1,616	1,263	7.322
국적 및 성별	내국인 남성	2,127	1,765	11.58
	내국인 여성	1,589	1,328	8.007
	외국인 남성	1,667	1,264	7.759
	외국인 여성	1,427	1,261	5.708
사증별	내국인	1,983	1,648	10.628
	비전문취업 (E-9)	1,638	1,228	7.69
	방문취업 (H-2)	1,565	1,342	6.527
	재외동포 (F-4)	1,655	1,372	6.664
	기타사증	1,442	1,242	6.418

□ 근로시간을 보면 여성이 294.4시간으로 남성 238.8시간에 비해 훨씬 긴 것으로 나타남.

○ 업종별 월평균 근로시간을 살펴보면, 서비스업이 가장 긴 것으로 나타났는데 이는 서비스업내 개인간병인, 가구내고용 등의 경우 하루의 대부분을 근로에 종사하고 있는 현실을 반영

○ 사업체 규모별 외국인근로자의 근로시간을 살펴보면, 종업원 1~4인의 영세업체의 근로시간이 296.4시간으로 훨씬 긴 것으로 조사됨.

□ 외국인 근로자의 임금수준이나 총노동비용은 내국인 근로자 고용비용보다 낮은 것으로 나타나며, 이를 생산성과 비교하면 총노동비용이 더 높은 수준임.

<내외국인별, 업종별, 사업체 규모별 월평균 근로시간>

		총근로시간	초과근로시간
국적성별	내국인 남성	218.8	34.2
	내국인 여성	215.8	29.8
	외국인 남성	238.8	46.2
	외국인 여성	294.4	20.4
업종별	농축산업	252.5	10.8
	어업	186.4	0.8
	제조업	239.9	50.1
	건설업	217.8	30.4
	서비스업	328	5.9
사업체 규모별	1~4인	296.4	8.6
	5~9인	228.5	24.6
	10~29인	239.5	47.6
	30~99인	242.8	59.7
	100~299인	257.2	67.7
	300인 이상	249.6	82.3

<내국인 대비 외국인 근로자의 생선성 · 임금 · 총노동비용, 20003-2012>

	근로시간	업무량	생산성	임금수준	총노동비용
2003년 조사	106.3	-	87.4	71.4	86.1
2005년 조사	100.8	88.3	84.2	85.1	-
2007년 조사	101.5	94.7	89	86.7	90.1
2012년 조사	100.2	91.7	85	82.7	90.1

□ 한편, 사회보험가입률을 보면 44.1%가 고용보험에 가입했으며, 87.5%는 건강보험에 가입했고, 63.9%는 국민보험, 88.3%는 산재보험에 가입

C. 외국인 근로자의 노동시장 영향

□ 외국인 근로자 고용에 따른 가장 부정적인 측면은 내국인 일자리 잠식이나 임금 및 근로조건의 저하

○ 국내의 연구결과들은 대체로 외국인 근로자 유입이 국내 저숙련 근로자의 임금을 하락시키는 효과가 미미하게 있지만 외국인근로자가 내국인근로자를 대체하는 효과는 미미하다고 분석

- 자료의 부족으로 연구가 활발하지 못한 측면이 있으나, 최근의 연구일수록 부정적인 영향을 발견하는 경향이 있음.

○ 그러나 외국인 근로자의 공급확대는 경쟁관계에 있는 내국인력의 일자리나 임금 등 근로조건에 부정적 영향을 미칠 가능성이 큼.

□ 사업장에서 외국인 근로자에 대한 의존도가 높아지고 있음.

○ 실태조사에 따르면 외국인 근로자에 대한 국내 사업장의 수요가 확대되고 있으며 그 이유는 필요한 내국인력을 구하기가 쉽지 않은 현실에 기인

○ 설문조사에 따르면 현실적으로 구인하기 쉬운 인력에 대해서는 일반 외국인 근로자가 49.4%로 가장 많고 그 다음으로 내국인력 24.2%의 순으로 조사됨.

- 이는 기업들이 가급적이면 내국인력을 채용하기를 원하지만 내국인력의 충원이 쉽지 않은 현실을 보여줌.

○ 저숙련 외국인 근로자 공급증대에 따른 내국인 노동시장의 부정적 영향이 주로 국내 취약계층에 집중

○ 외국인근로자를 고용하는 사업장에서 외국인력에 대한 의존도가 심화됨.

- 이러한 결과가 외국인근로자가 내국인근로자를 대체하기 때문인지, 고용주가 외국인 근로자를 선호하기 때문인지는 불분명하며 보다 심층적인 분석이 요구

〈외국인력 고용업체의 외국인 의존도〉

		2005			2011		
		외국인	내국인	외국인력 비율	외국인	내국인	외국인력 비율
업종	제조	34,926	766,097	4.36	205,262	956,004	17.68
	건설	91	10,117	0.89	14,756	11,792	55.58
	농축산	380	3,661	9.40	12,561	4,717	72.70
	서비스	10,523	69,406	13.17	34,695	110,166	23.95
	어업	6	465	1.27	3,096	620	83.32
	미상				488		100.00
규모	5인미만	19,163	90,603	17.46	90,736	126,289	41.81
	5-9인	7,293	59,087	10.99	35,926	93,193	27.82
	10-29인	11,805	206,050	5.42	73,767	271,610	21.36
	30-49인	3,415	121,306	2.74	26,826	145,875	15.53
	50-99인	2,374	144,738	1.61	22,618	171,733	11.64
	100-299인	1,178	165,855	0.71	15,374	194,020	7.34
	300인이상	107	49,820	0.21	1,034	63,280	1.61
	미상	591	12,287	4.59	4,577	17,299	20.92
전체		45,926	849,746	5.13	270,858	1,083,299	20.00

V. 외국인력 정책현안과 향후 과제

1. 외국인력정책의 문제점

□ 인력부족에 기초한 외국인력 도입 논리는 외국인력의 지속적 확대를 가져옴.

○ 그 동안 외국인 근로자의 확대는 생산관련 직종의 인력부족률 및 사업주의 외국인 근로자 수요의 확대에 근거

- 현재의 노동시장 수급여건을 고려하면 외국인 근로자에 대한 수요는 지속적으로 확대될 수밖에 없는 구조이므로 인력부족의 원인에 대한 고려 필요

○ 외국인 근로자가 집중적으로 취업하고 있는 30인 미만 사업장의 인력부족률 통계는 외국인 근로자의 지속적인 확대에도 불구하고 감소하지 않는 특징

- 특히 2009년 경기침체시기에도 인력부족률이 하락하지 않은 점은 소규모 영세사업장에서의 인력부족문제가 만성화되어 있음을 시사

- 외국인근로자를 선호하는 이유가 낮은 임금 외에 외국인 근로자의 장시간 근로선호, 내국인 근로자의 잦은 이직 등 다양한 요인에서 기인

□ 내국인 구인노력이 실질적으로 이루어질 수 있도록 제도를 개선할 필요

○ 외국인 고용허용 업종 중 내국인 구인이 상대적으로 용이한 업종이나 규모의 경우 구인의무기간의 강화, 내국인 취업알선의 확대를 통해 내국인 고용을 유도

□ 외국인 근로자의 정주화에 따른 사회적 비용 확대

○ 장기체류가 생산성을 보장하는 것이 아니므로 정주는 선별적으로 허용

□ 외국인력 활용에 따른 편익수혜자와 비용부담자가 불일치

○ 외국인력 고용에 따른 직간접 비용은 대부분 국민이 부담

□ 기업의 선택권이 제약되어 수요에 적합한 외국인력 확보가 곤란

○ 기업이 요구하는 숙련도나 기능을 파악하기 어려움.

□ 방문취업제를 바라보는 시각은 동포정책과 노동시장정책의 두 관점이 있음.

○ 동포정책의 입장에서는 동포들을 내국인 노동시장으로 통합하는 것이 목적

○ 노동시장정책 관점에서는 일반 외국인 근로자와 같은 규제적 접근

□ 비전문, 전문인력의 이분법적 접근으로 정책결정이 종합적으로 이루어지지 못하고, 도입규모를 비롯한 대부분의 논의가 비전문인력을 중심으로 이루어짐.

○ 유학생, 결혼이민자 등 다양한 이민자에 대한 고려 부족

○ 정책 수립 및 운영에 중장기적인 인구 및 노동시장 구조 변화, 산업구조 변화 등이 반영되지 못함.

○ 기초연구 및 통계 정비 필요

2. 외국인력 정책과제

□ 국내 노동시장 보완의 원칙, 정주화 방지 원칙, 산업구조조정 저해 방지 원칙, 외국인력활용에 따른 경제사회적 편익제고의 운용 등 제도 운영의 원칙 정립

○ 노동시장테스트 제도의 내실화 등으로 내국인 노동시장 보호 강화

○ 선발 및 채용과정의 효율화, 편익수혜자와 비용부담자의 일치화로 외국인력의 생산성 제고를 통해 기업경쟁력 강화

○ 불법체류문제에 대한 적극적 대처 등으로 외국인력 고용의 사회적 비용 감소

○ 동포정책의 방향을 설정하고 동포들의 정주화에 따른 사회통합정책 제고

○ 다양한 수요에 부합하는 전문인력 도입과 정책지원체계 마련

- 전문인력의 범주와 개념의 재정비 필요: 고급인력, 전문인력, 준전문인력

< 국문요약 >

"한국 보육정책의 현황과 과제"

KDI 재정·사회정책연구부
김 인 경

1. 연구의 배경

□ 최근 보육정책의 잇따른 개편에도 불구하고 성과에 대한 우려가 제기되는 것은 보육정책의 목표를 이해하고 이를 달성하는 데 효과적인 정책 수단이 시행되지 못했기 때문

○ 작년 3월부터 0~2세아와 5세아의 종일제 보육료가 지원되고 있으며, 금년 3월부터는 종일제 보육료와 양육수당 지원대상이 전 계층으로 확대될 예정

○ 모든 영유아가 종일제 보육료를 지원받게 되면서 시설에서는 장시간 자녀를 맡기는 맞벌이 가구보다 외벌이 가구의 자녀를 선호하는 경향

○ 보육 품질이 만족할 만한 수준으로 높지 않아 보육료(시설보육)와 양육수당(직접양육) 간 부모의 선택권이 실지로 보장되기는 어려울 가능성

□ 본고는 보육정책의 목표를 설정하고 이에 비춰 현재의 보육정책을 검토한 후 목표와 일관된 정책방향을 제시하고자 함.

2. 보육정책의 목표

□ 보육정책은 영유아의 건전한 발달을 도모하는 데 목표를 두어야 함.

○ 초기에 형성된 인적역량은 뒤따르는 교육의 성과를 결정

- 인적역량은 개인의 사회경제적 성공을 좌우하는 역량으로, 인지능력과 인내심, 계획성, 절제력, 학습동기 등 사회정서적 능력으로 구성됨.
- 인적역량이 일찍 계발될수록 추가적인 교육투자의 생산성이 높아져 일생에 걸쳐 습득한 역량이 제고될 수 있음.

○ 따라서 보육은 향후 인적자본 축적의 토대를 마련

- 우수한 보육은 영유아의 인지적·언어적·사회정서적 발달에 긍정적인 영향을 미치는 것으로 알려져 있음.

□ 또한 양육부담을 완화하여 여성의 경제활동 참여를 증진할 수 있어야 함.

○ 연령별 여성 경제활동참가율을 살펴보면, OECD 주요국은 역U자형의 모습을 보이는 반면, 우리나라는 양육기 여성이 노동시장에서 이탈한 후 재진입함에 따라 M자형의 패턴을 보임.

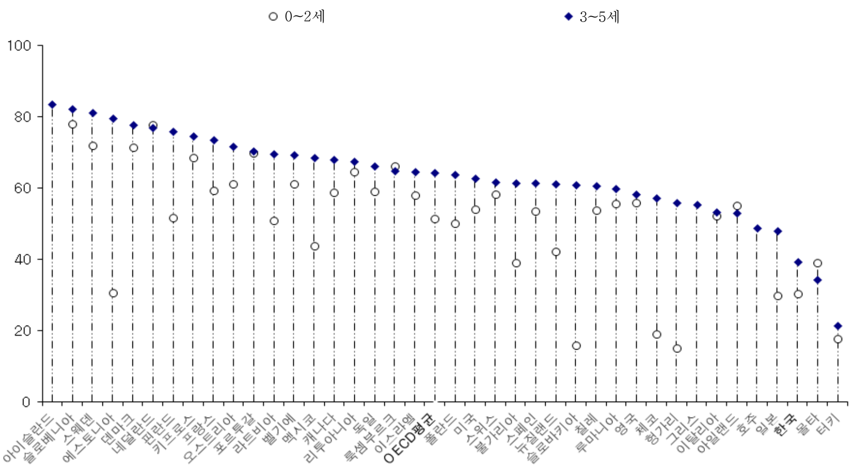
○ 이는 영유아 자녀를 둔 여성의 고용률이 다른 국가에 비해 낮기 때문(그림 1).

- 2009년 최연소 자녀가 영아(0~2세)인 여성의 고용률은 30.3%로, [그림 1]의 국가 중 우리나라보다 해당 여성의 고용률이 낮은 국가는 헝가리, 슬로바키아, 체코, 터키, 일본(2005년 수치)에 불과함.
- 같은 해 최연소 자녀가 유아(3~5세)인 여성의 고용률은 [그림 1]의 국가 중 터키, 몰타 다음으로 낮은 39.2%를 기록

○ 여성의 경력 단절은 근로인력의 양적인 감소뿐만 아니라 노동생산성의 증가를 저해하여 질적인 저하도 초래

- 경력단절기간에는 인적자본에 대한 투자가 감소하고 기존에 축적된 인적자본이 손실되므로, 경력단절을 경험한 여성은 이전보다 낮은 전문성을 요구하는 직종으로 복귀(김정호[2010])

[그림 1] 국가별 영유아 모의 고용률(2009년, 최연소 자녀 기준)



주: 한국의 수치는 12차연도 한국노동패널을 이용하여 필자가 추산; 칠레는 2010년, 스웨덴은 2007년, 스위스는 2006년, 일본과 미국은 2005년, 아이슬란드는 2002년, 캐나다는 2001년, 덴마크는 1999년 수치임; 이스라엘은 최연소 자녀가 0~1살, 2~4살인 여성의 고용률이, 호주와 아이슬란드는 최연소 자녀가 5살 미만인 여성의 고용률이 계산됨.
자료: OECD Family Database(www.oecd.org/social/family/database); 한국노동패널.

□ 출산율 제고 역시 우리나라 보육정책의 중요한 목표로 인식되어 왔음.

○ 2009년 우리나라의 출산율은 1.15명으로, 2002년 이래 OECD 국가 중 가장 낮은 출산율을 보이고 있음.

○ 보육료 지원과 보육서비스 질 개선은 출산비용을 낮춰 출산에 대한 기피를 완화할 수 있는 방안

- 출산비용은 직접적인 양육비용, 경력단절에 따른 근로소득의 상실, 경력단절기간 동

안의 인적자본 마모로 인한 노동시장 복귀 후 소득의 감소로 구분됨.

- 보육료 지원은 직접적인 양육비용을 절감해 줄 뿐만 아니라 보육비용 부담으로 인한 여성의 노동시장 이탈을 방지
- 한편, 우수한 보육서비스는 영유아의 발달에 긍정적인 효과가 있어 여성 경제활동의 기회비용을 낮춤으로써 출산 후 노동시장 재진입을 촉진

3. 보육정책의 현황

□ 금년 3월부터 모든 계층의 영유아에게 종일제 보육료(월~금: 07:30~19:30, 토: 07:30~15:30) 혹은 양육수당이 지급

○ 영유아 연령에 따라 어린이집 혹은 사립 유치원 이용 시 22만~39.4만원이 바우처 형태로 지원되며, 가정양육을 선택할 경우에는 10만~20만원이 현금으로 지원됨(표 1).

□ 어린이집은 유형별로 보조금지원과 임금설정방식이 상이함(표 2).

○ 어린이집은 설치・운영자에 따라 국공립, 사회복지법인, 법인・단체 등, 직장, 가정, 민간, 부모협동 어린이집 등 총 7개의 유형으로 구분

○ 국공립, 사회복지법인, 법인・단체 등, 직장 어린이집은 교직원 인건비가 매월 일정 비율 혹은 일정 금액 보조되며 교직원의 임금은 호봉에 맞춰 지급해야 함.

○ 반면, 가정, 민간, 부모협동 어린이집의 경우 등록 영아 한 명당 매월 기본보육료가 지원되는 대신 교직원 임금은 최저임금 이상으로 자율적으로 결정할 수 있음.

〈표 1〉 연령별 보육료・양육수당 지원액 및 지원대상(2013년)

<table>
<tr><th></th><th>연령</th><th>월 보육료 지원액
(종일제 기준)</th><th>월 양육수당</th><th>지원대상</th></tr>
<tr><td rowspan="3">영아</td><td>0세</td><td>394,000원</td><td>12개월 미만: 200,000원</td><td rowspan="6">전 계층</td></tr>
<tr><td>1세</td><td>347,000원</td><td>24개월 미만: 150,000원</td></tr>
<tr><td>2세</td><td>286,000원</td><td>36개월 미만: 100,000원</td></tr>
<tr><td rowspan="3">유아</td><td>3세</td><td rowspan="3">220,000원</td><td rowspan="3">100,000원</td></tr>
<tr><td>4세</td></tr>
<tr><td>5세</td></tr>
</table>

자료: 보건복지부 보도자료「보육료, 양육수당 어떻게 지원받나요?」, 2013. 1

〈표 2〉 어린이집 유형별 개소, 이용 현황, 주요 지원, 보육교직원 임금
(개소와 이용현황은 2012년 8월 기준)

	국공립	사회복지 법인	법인・단체등	직장	가정	민간	부모협동
개소 (전체 시설 대비 %)	2,174 (5.2)	1,448 (3.5)	876 (2.1)	500 (1.2)	22,359 (53.5)	14,340 (34.3)	106 (0.3)
영유아 수 (전체 이용아동 대비 %)	146,603 (10.2)	108,985 (7.6)	49,401 (3.5)	28,782 (2.0)	351,996 (24.6)	743,365 (51.9)	2,741 (0.2)
주요 지원	원장 및 보육교사 인건비의 30~80%			원장, 보육교사, 취사부 월 80만원 (중소기업은 월 100만원)	등록 영아 수에 따라 매월 기본보육료 지원 0세: 361,000원 1세: 174,000원 2세: 115,000원		
보육교직원 임금	호봉제				최저임금 이상 자율적으로 결정		

주: 직장 어린이집은 고용노동부로부터 교직원 인건비 외에도 시설설치비와 교재・교구비 등을 지원받음.
자료: 아이사랑보육포털(www.childcare.go.kr), 보건복지부(2012).

□ 각 지자체는 어린이집의 수급현황을 감안하여 신규 어린이집의 설치를 규제할 수 있음.

○ 지자체장은 해당 지역의 어린이집 정원이 보육수요 혹은 현원보다 많을 경우, 어린이집 과잉공급에 따른 보육 품질 저하를 우려하여 사회복지법인, 법인・단체 등, 가정, 민간 시설의 인가 제한이 가능

- 보육수요는 해당 권역 내 아동 수와 보육수요율(현재 어린이집 등록아동과 향후 등록을 희망하는 아동의 비율)의 곱으로 도출

○ 2011년 기준으로, 전체 230개의 시군구 중 42.6%가 인가를 부분적으로 제한하고 34.3%가 전면 제한(서문희 외[2011])

□ 한편, 최근 정부는 보육품질 향상을 위해 모니터링과 정보공개를 강화하고 있음.

○ 작년부터 평가인증시설 확인점검이 시작되고, 모든 규모의 어린이집에 부모가 참여하는 운영위원회 설치가 의무화되었으며, 특별활동비, 현장학습비 등 기타 경비 및 교직원 소지 자격증, 근속년수 등이 공개되었음.

○ 금년 내에 예정대로 어린이집 행정처분 이력, 평가인증 세부 점수가 공개될 경우 보육품질 확인과 시설 간 품질 비교는 더욱 용이해질 것으로 예상

4. 보육정책의 문제점

가. 출산율 제고를 위한 양육비 경감에의 치중

□ 우리나라는 그간 양육비 보조를 통해 출산율 상승을 도모해 왔으나, 양육비 지원은 출산 자녀 수의 증가보다는 출산 시점을 앞당기는 데 더 효과적이라는 게 학계의 중론(Grant *et al.*[2004]; Gauthier[2007]; Thévenon[2011])

- ○ 예를 들어, Ekert(1986)은 1970년대 후반 프랑스의 현금 지원이 자녀 수를 0.2명 증가시키는 데 그쳤으며, 자녀 양육비를 국가에서 전액 보조하더라도 자녀 수는 그저 0.3명 증가하는 것으로 추정(Thévenon[2011]에서 재인용)
- ○ Ermisch(1988)에서도 영국의 아동수당이 조기 출산을 장려하지만 2배의 인상에도 평균 자녀 수는 0.17명 증가하는 것으로 나타남.

□ 비근로 여성에 대한 양육비 지원은 여성의 근로의욕을 낮추므로, 고령화에 직면하여 유휴 인력의 활용이 절실한 우리나라의 상황에서는 양육비 지원에 신중을 기할 필요

- ○ 여성의 근로 여부와 무관한 양육보조는 가구의 부가소득을 높여 노동시장 참여유인을 저해하는 반면, 노동시장 참여를 전제로 한 양육보조는 노동공급을 제고하는 동시에 세원을 확대하여 정부의 지원 부담을 일부 상쇄(조윤영[2006])
- ○ 인구가 고령화됨에 따라 노령 관련 재정지출이 증가하고 세수가 감소하는 한편, 노동투입량과 노동생산성이 저하되면서 경제성장이 둔화될 우려
- ○ 근로 여성에게 양육비를 지원함으로써 여성 경력의 연속성을 보장하는 것은 세수확보와 경제성장 차원에서 효과적인 고령화 대응 전략

□ 최근 외국의 가족정책은 양육비 지원보다는 일과 가정의 양립을 지원하는 방향으로 전환하며 출산율과 여성 고용률의 동반 상승을 추구

- ○ 서유럽의 경우, 1970년대부터 가족정책의 기조는 현금지원에서 출산휴가와 육아휴직의 제공, 보육시설의 확충, 유연근무제의 실시 등 여성의 육아와 경제활동의 병행을 지원하는 방향으로 변모(McIntosh[1986]; Castles[2003]; McDonald[2006])
- ○ 나아가 1990년대부터는 국제적으로 남성의 가사와 육아 참여가 바람직하다는 데 합의가 이루어지며 남성에게 육아휴직을 할당(father's quota)하는 국가가 증가함(Gauthier[2005]).
- ○ 그 결과, 부(-)의 상관관계를 보이던 OECD 국가의 여성 고용률과 출산율은 1980년대 후반 이래로 정(+)의 상관관계를 유지

나. 여성의 근로여부 및 가구소득과 무관한 획일적 지원

□ 아동발달에 있어서 장시간의 시설 보육이 필요하지 않은 비근로 여성의 영유아에게도 종일제보육료를 지원함으로써 재정운용의 효율성을 저해

○ 영아기는 양육자와의 애착형성과 오감학습 등이 필요한 시기로(서유헌[2010]), 부모가 애정을 갖고 아이를 세심하게 보살필 수 있는 여건이 된다면 장시간의 시설보육은 불필요

- 특히 0세아의 경우, 북유럽에서는 시설에 맡기기보다는 육아휴직을 통해 부모가 직접 양육하는 것이 일반적
- 2010년 기준 0세아 시설 이용률은 우리나라가 27.9%인 반면, 덴마크, 핀란드, 노르웨이, 스웨덴은 각각 17.5%, 1.0%, 4.2%, 0.0%에 불과(Norden[2011])

○ 유아기는 인성이 형성되고 창의성과 언어가 발달하는 시기로(서유헌[2010]), 교육적인 상황에의 노출과 타인과의 교류가 필요하지만 교육환경이 장시간 시설에 국한될 필요는 없음.

- 영국에서는 시간제와 전일제로 시설을 이용한 유아 간에 발달상 통계적으로 유의미한 차이가 발견되지 않았음(Melhuish[2004]).

□ 전 계층의 영유아에 대한 보육료와 양육수당 지원은 교육자원 투입 면에서 비효율적일 뿐더러, 계층 간 교육격차를 확대한다는 점에서 형평에 어긋남.

○ 고소득층 영유아는 다양한 교육기회에 노출되어 인적역량에 대한 투자가 상대적으로 높으므로, 추가적인 교육자원 투입의 효과는 크지 않음.

○ 영유아 때 인적역량이 온전하게 발달하지 못한 아동은 동일한 교육자원의 투입에도 추가적인 역량 축적이 미흡하기 때문에, 일생 초기에 벌어진 계층 간 교육격차는 점차 확대되는 양상을 보임(Carneiro and Heckman[2005]).

○ 유아를 시설에 보내지 않고 양육수당을 선택한 저소득·저학력 여성이 가정에서 유아의 발달에 필요한 학습 자극을 충분히 제공하지 못할 경우 계층 간 학업역량의 차이가 이른 시기부터 확대될 가능성

- 양육수당은 여성 중에서도 경력단절의 기회비용이 낮은 저소득·저학력 여성의 노동공급을 억제하는 효과

□ 더욱이 취약계층 영유아에 대한 통합적 지원은 그 효과가 상당함에도 불구하고, 극히 일부의 아동만이 혜택을 받고 있는 상황

○ 저학력, 저소득 부모를 둔 3~4세 유아를 대상으로 인지교육과 가정방문을 실시했던 미국의 High Scope Perry Preschool Program의 경우, 수혜 아동이 40세 때 비용 대비 편익이 16배에 달함.

- 편익은 범죄율의 감소, 직업훈련과 재활 지원비의 절감, 복지 의존도의 감소, 세수입의 증대 등 사회적 편익과 임금의 증가 등 개인적 편익의 합으로 계산(Schweinhart et al.[2005]; Center on the Developing Child[2007]에서 재인용)

○ 2009년 기준 차상위계층 이하 가구의 영아와 유아는 각각 14만 명, 12만 명 가량으로 추정되나(이봉주 외[2009]), 이들을 대상으로 하는 드림스타트사업의 수혜아동은 3,582명(2.5%), 5,339명(4.5%)에 불과

- 드림스타트는 저소득 밀집지역에 거주하는 임산부와 12세 이하 아동가구를 대상으로 맞춤형 통합지원서비스를 제공함으로써 아동의 전인적 발달과 가족기능의 회복을 도모하는 아동복지정책의 일환

다. 품질 정보 부족에 따른 시설 간 경쟁 기반의 취약

□ 그간 저품질의 보육이 제공되었던 것은 보육 품질에 대한 정보가 부족하여 서비스 공급자가 양질의 보육을 제공할 유인이 저하되었기 때문

○ 부모는 객관적인 정보가 부족하여 주변의 평가와 방문・상담에 근거하여 어린이집을 선택하는 경향

- 시설의 여러 특성 중에서도 특히 원장 및 교사의 학력・자격・전공, 학대・법 위반 내역, 위생・건강 등 보호 수준에 대한 정보를 파악하기 어려움.
- 부모는 어린이집에 대한 정보를 이웃(40.8%)과 방문 및 상담(33.3%)을 통해 주로 습득하나, 부모의 사회경제적 특성과 정보의 취득 경로에 따라 보육의 질을 전문가와 달리 평가할 가능성(서문희・이우정[2012], Mocan[2007])

○ 소비자가 품질 파악에서 열위에 놓였을 때 보육 교직원이 영유아에게 유통기한이 지난 급식을 주거나 폭력을 행사하는 등 도덕적 해이 현상이 발생

□ 어린이집 유형별로 보육 품질이 다르게 인식되는 경향

○ 국공립 어린이집은 이윤을 추구하지 않고 고품질의 보육을 제공하는 것으로 평가되나, 등록을 희망하는 영유아에 비해 공급이 부족하여 추가 설립의 필요성이 강하게 제기되고 있음.

- 2012년 8월 기준으로, 국공립 어린이집은 전체 어린이집의 5.2%를 차지하며 시설 이용 영유아의 10.2%가 등록(표 2)

□ 특히 관찰이 수월하지 않은 질적 지표의 경우 시설 유형에 따라 부모 만족도가 다름(표 3).

○ 내부 분위기, 건강 관리, 급・간식 관리, 안전 관리 등 주로 부모가 부재한 일과 중의 활동은 가정과 민간 어린이집보다 국공립 혹은 법인 어린이집을 이용하는 부모가 더 흡족하게 인식

- 만족도를 보통 이상으로 만족하는 확률이라고 할 때, 내부 분위기와 안전 관리에 대한 만족도가 가정 및 민간 어린이집보다 법인 어린이집을 이용할 경우 각각 12%p, 9%p 높음.
- 국공립 어린이집을 이용할 경우 가정 및 민간 어린이집에 다닐 때보다 건강 관리와 급・간식 관리에 대한 만족도가 각각 9%p, 12%p 높으며, 법인 어린이집을 이용할 경우 각각 10%p, 13%p 높음.

○ 반면 시설설비・실내환경, 교재교구 및 장비 등 기관을 방문하여 비교적 즉각적으로 확인할 수 있는 항목의 경우 부모 만족도에서 시설 유형 간 차이가 나타나지 않음.

〈표 3〉 시설 유형별 어린이집 만족도(가정 및 민간 어린이집 대비)

	주변환경	시설설비・실내환경	교재교구 및 장비	내부 분위기	건강 관리	급・간식 관리	안전관리	교육내용
국공립어린이집	0.04 (0.05)	−0.00 (0.04)	0.00 (0.05)	0.04 (0.04)	0.09** (0.04)	0.12*** (0.04)	0.04 (0.04)	−0.02 (0.04)
법인어린이집	0.09* (0.05)	0.06 (0.05)	−0.05 (0.05)	0.12*** (0.04)	0.10** (0.05)	0.13*** (0.04)	0.09** (0.04)	0.09* (0.04)
직장어린이집	−0.05 (0.11)	0.17 (0.10)	0.17 (0.11)	0.25** (0.10)	0.13 (0.10)	0.19* (0.10)	0.18* (0.10)	0.05 (0.10)

주: * , **, ***은 각각 유의수준 10%, 5%, 1%에서 통계적으로 유의함을 의미; 사회복지법인과 법인・단체 등 어린이집을 법인 어린이집으로 통칭함; 가정, 민간 어린이집을 준거집단으로 사용; 피설명변수는 각 항목에 보통이상 만족한다고 응답했을 때 1로, 보통 미만으로 만족한다고 응답했을 때 0으로 둠; 회귀분석에 이용된 시설은 총 1,181개로 부모협동 어린이집의 관측치는 2개에 지나지 않아 자료에서 누락함; 표에 보고한 변수 외에 아동연령, 모 학력, 가구 소득, 월 보육료, 모 근로여부, 부모의 표준보육과정과 평가인증 인지 여부와 모니터링단 참여 의사, 시・도 더미를 추가적으로 통제하였음.

자료: 2009년 전국보육실태조사를 이용하여 필자가 계산.

□ 이는 보육 품질 확인이 용이하지 않은 상황에서 서비스 제공 동기 혹은 이윤 추구 가능 정도가 시설 유형 별로 상이한 데 기인한 것으로 판단됨.

○ 국공립과 법인 어린이집 운영자는 교육적・종교적 신념 등으로 인해 고품질의 보육에서 효용을 느끼거나 임금이 호봉제로 지급됨에 따라 운영 이익의 사적 소유가 제한될 가능성이 높아, 관찰이 어려운 질적 항목에 대해서도 양질의 서비스를 제공할 수 있음.

○ 반면, 가정 및 민간 어린이집은 상대적으로 이윤 추구에 중점을 두거나 개인 운영자가 이윤의 용도를 결정하는 데 자유로울 수 있어, 부모의 확인이 어려울 때 도덕적 해이가 발생할 여지가 많음(Rose-Ackerman[1996], Glaeser and Shleifer[2001], Morris and Helburn[2000]).

라. 양적규제로 인한 시설 간 경쟁의 제한

□ 아울러 기존 시설은 양적 규제로 인해 경쟁에서 보호받기 때문에 서비스 질을 개선할 유인이 부족

○ 인가가 제한된 지역에서는 신규 어린이집을 설치할 수 없기 때문에 어린이집 인수자가 과도한 권리금을 지불하고 있어, 추후 이를 만회하기 위해 운영비용을 절감할 경우 보육서비스 질 저하가 나타날 우려

○ 양적인 진입규제로 인해 저품질의 보육서비스를 제공하는 시설도 아동 수를 일정 수준 보장받음으로써, 기타 경비를 과도하게 청구하거나 부모의 요구를 수용하지 않더라도 시장에서 퇴출되지 않음.

○ 양적 규제로 인해 경쟁의 압력에서 보호받는 기존 어린이집은 독점 이윤을 유지하고자 운영비용과 서비스 질 공개에 반대할 유인이 높음.

5. 보육정책의 개선방안

□ 소득에 따라 보육료와 양육수당을 차등 지원하고, 여성의 근로 여부에 따라 보육료가 지원되는 어린이집 이용시간을 달리 설정할 필요

○ 저소득 가구 여성의 노동시장 참여를 촉진하고 영유아의 발달을 도모하기 위해 소득이 낮을수록 더 많은 보육료를 지원

○ 양육수당의 지급은 계층 간 교육투자의 형평성을 도모하기 위해 저소득층 영아에 한정

○ 미취업 또는 육아휴직 중인 여성의 영유아에게는 장시간의 시설보육이 필요하지 않으므로, 보육료가 지원되는 어린이집 이용시간을 현행 종일제에서 시간제로 단축

- 이는 시간제 보육료 지원액과 양육수당 간의 격차를 완화하는 효과도 낳음.

□ 취약계층 영유아에 대한 맞춤형 통합지원서비스를 조기에 보급하는 데 주력할 필요

○ 최근 가정환경이 학업성취도에 미치는 영향이 심화되면서, 취약계층 영유아에 대한 지원이 조기에 보강되지 않을 경우 세대 간 경제적 이동성이 감소할 우려(Byun and Kim [2010]; 김희삼[2009])

○ 드림스타트 등 취약계층 영유아에 대한 교육, 건강, 복지 등 맞춤형 통합지원서비스를 확대할 필요

□ 보육 품질을 전반적으로 개선하기 위해서는 어린이집에 대한 모니터링과 정보공개를 강화하여 경쟁기반을 조성할 필요

○ 소비자가 품질과 가격 정보를 상세하게 보유할 때 어린이집 간 영유아를 유치하기 위한 경쟁이 활발해지면서, 시설은 우수한 프로그램을 저렴한 가격에 제공하기 위한 혁신을 추구

○ 부모가 시설 간 보육 품질과 가격을 비교하기 위해서는 정보공개와 모니터링을 강화할 필요

- 그간 관찰이 어려웠던 지표도 확인할 수 있도록 정보(평가인증 세부 점수, 어린이집 행정처분 이력, 보육료 외 기타 경비, 프로그램 내용, 종사자 현황 등) 공개와 평가인증시설 확인점검, 부모 모니터링단과 어린이집 운영위원회 활동의 상시화 등에 내실을 기할 필요
- 아동 발달에 있어서 우수한 보육의 중요성을 적극 홍보하는 한편, 시설 선택 시 세부적인 지표에 대한 부모의 자체 평가가 용이하도록 전문가가 창안한 간이평가항목을 배포하는 것이 바람직

○ 이를 통해 경쟁기반이 마련된다면 민간시설은 국공립 시설보다 효율적인 운영하에 우수한 보육을 제공할 가능성

- 국공립 시설에 비해 이윤 추구 동기가 강한 민간시설은 항시 저품질의 보육을 제공한다는 우려가 있으나, 시설에 대한 객관적인 정보가 유통될 경우 오히려 민간시설이 경쟁에서 우위를 점하고자 품질 개선 및 비용 절감에 적극적(Shleifer[1998])

○ 외국의 경우 시설에 대한 질적 규제가 강화될 경우 비영리시설과 영리시설 간에 질적 차이가 관측되지 않은 바 있음.

- 미국에서는 시설 설립 시 질적 규제가 미흡한 주에 한해서만 관찰이 어려운 질적 항목에서 비영리시설과 영리시설 간에 차이가 발견(Morris and Helburn[2000])
- 스웨덴에서는 아동의 인지적・사회정서적 발달상 영리와 비영리 유아원을 다니는 유아 간에 차이가 없었는데, 이는 일정한 질적 요건을 충족한 영리기관에 한해서만 비영리기관과 동일한 경제적 지원이 이루어졌기 때문인 것으로 추측됨 (Sundell[2000]).

□ 나아가 시설에 대한 양적 규제를 폐지하여 시설 간 경쟁을 활성화하는 것이 바람직

○ 양적 규제하에서는 아동 확보가 수월하여 경쟁이 미약하므로, 모니터링과 정보공개가 강화되더라도 보육 품질을 개선할 유인이 제한적

□ 보육수요가 충분하지 않아 민간시설이 진입하지 않는 지역은 정부가 직접 서비스를 공급할 필요

○ 영유아 수가 부족하여 민간시설이 생겨나기 어려운 농어촌 지역 등은 국공립 어린이집을 확충하는 것이 바람직

참고문헌

김정호, 『여성의 경력단절과 인적자본 형성 분석』, 정책연구시리즈 2010-19, 한국개발연구원, 2010.

김희삼, 『한국의 세대 간 경제적 이동성 분석』, 정책연구시리즈 2009-03, 한국개발연구원, 2009.

보건복지부, 『2012년도 보육사업안내』, 2012.

서문희・도남희・송신영, 『어린이집 설치・인가 실태와 개선방안』, 육아정책연구소, 2011.

서문희・이우정, 『어린이집 정보공시제도 도입을 위한 기초 연구』, 연구보고 2012-03, 육아정책연구소, 2012.

서유헌, 『내 아이의 미래가 달라지는 엄마표 뇌교육』, 아이트리, 2010.

이봉주・곽금주・구인회・김민화・김선숙・김지현・김혜란・박혜준・신혜은・윤명희・이강이・이광호・이순형・정익중・진미정, 『한국 아동청소년 종합실태조사』, 보건복지가족부・서울대학교 산학협력단, 2009.

조윤영, 『기혼 여성의 출산과 노동공급: 생애주기모형』, 정책연구시리즈 2006-01, 한국개발연구원, 2006.

Byun, Soo-yong and Kyung-keun Kim, "Educational Inequality in South Korea: The Widening Socioeconomic Gap in Student Achievement," *Research in Sociology of Education* 17, 2010, pp.155~182.

Carneiro, Pedro and James J. Heckman, "Human Capital Policy," in James J. Heckman and Alan B. Krueger (eds.), I*nequality in America: What Role for Human Capital Policies*, Cambridge: MIT Press, 2005, pp.77~239.

Castles, Francis G., "The World Turned Upside Down: Below Replacement Fertility, Changing Preferences and Family-Friendly Public Policy in 21 OECD Countries," *Journal of European Social Policy* 13(3), August 2003, pp.209~227.

Center on the Developing Child, *A Science-Based Framework for Early Childhood Policy: Using Evidence to Improve Outcomes in Learning, Behavior, and Health for Vulnerable Children*, Harvard University, August 2007.

Ekert, O., "Effets et Limites des aides Financière aux Familles: Une Expérience et un Modèle," *Population* 41(2), 1986, pp.327~348.

Ermisch, John, "Econometric Analysis of Birth Rate Dynamics in Britain", *Journal of Human Resources* 23(4), Autumn 1988, pp.563~576.

Gauthier, Anne H., "Trends in Policies for Family-Friendly Societies," in Miroslav Macura, Alphonse L. MacDonald, and Werner Haug (eds.), *The New Demographic Regime: Population Challenges and Policy Responses,* United Nations, 2005, pp.95~110.

Gauthier, Anne H., "The Impact of Family Policies on Fertility in Industrialized Countries: A Review of the Literature," *Population Research and Policy Review* 26(3), 2007, pp.323~346.

Glaeser, Edward L. and Andrei Shleifer, "Not-for-Profit Entrepreneurs," *Journal of Public Economics* 81, 2001, pp.99~115.

Grant, Jonathan, Stijn Hoorens, Suja Sivadasan, Mirjam van het Loo, Julie DaVanzo, Lauren Hale, Shawna Gibson, and William Butz, *Low Fertility and Population Ageing: Causes, Consequences and Policy Option*, RAND Europe, 2004.

McDonald, Peter, "Low Fertility and the State: The Efficacy of Policy," Population and Development Review 32(3), 2006, pp.485~510.

McIntosh, Alison, "Recent Pronatalist Policies in Western Europe," *Population and Development Review* 12, 1986, pp.318~334.

Melhuish, Edward C., "A Literature Review of the Impact of Early Years Provision on Young Children, with Emphasis Given to Children from Disadvantaged Backgrounds," Institute for the Study of Children, Families and Social Issues, University of London, 2004.

Mocan, Naci, "Can Consumers Detect Lemons? An Empirical Analysis of Information Asymmetry in the Market for Child Care," *Journal of Population Economics* 20(4), 2007, pp.743~780.

Morris, John R. and Suzanne W. Helburn, "Child Care Center Quality Differences: The Role of Profit Status, Client Preferences, and Trust," *Nonprofit and Voluntary Sector Quarterly* 29(1), September 2000, pp.377~399.

Norden, *Nordic Countries in Figures 2011*, Copenhagen: Nordic Council of Ministers and The Nordic Council, 2011.

Rose-Ackerman, Susan, "Altruism, Nonprofits, and Economic Theory," *Journal of Economic Literature* 34, June 1996, pp.701~728.

Schweinhart, L. J., J. Montie, Z. Xiang, W. S. Barnett, C. R. Belfield, and M. Nores, *Lifetime Effect: The High/Scope Perry Preschool Study Though Age 40*, Ypsilanti: High/Scope Press, 2005.

Shleifer, Andrei, "*State Versus Private Ownership*," NBER Working Paper 6665, July 1998.

Sundell, Knut, "Examining Swedish Profit and Nonprofit Child Care: The Relationships Between Adult-to-Child Ratio, Age Composition in Child Care Classes, Teaching and Children's Social and Cognitive Achievements," *Early Childhood Research Quarterly* 15(1), 2000, pp.91~114.

Thévenon, Olivier, "Does Fertility Respond to Work and Family-life Reconciliation Policies in France?" in Noriyuki Takayama and Martin Werding (eds.), *Fertility and Public Policy: How to Reverse the Trend of Declining Birth Rates*, Cambridge: MIT Press, 2011, pp.219~260.

< 국문요약 >

“한국 일차의료 발전을 위한 모색”

KDI 재정·사회정책연구부
윤 희 숙

1. 우리나라의 일차의료

□ 일차의료는 의료시스템의 접근성, 비용효과성, 통합성 등을 포괄하는 종합적인 의료개혁 아젠다

○ 최초진료나 의원급 진료로 인식되기도 하나, 복잡한 의료시스템에서 환자가 적절한 의료서비스를 받도록 지원하는 시스템 차원의 기능을 의미

○ 다수의 국가에서 나타나는 문제점인 ‘첨단기술 중심, 고가장비 중심, 병원 중심, 조율되지 않는 파편화된 의료’에 대칭되는 개념

○ 의료서비스의 접근성, 부문 간 협조와 조율에 기반한 통합성과 비용효율성을 제고하기 위한 전략 개념이기도 함.

□ 우리나라의 의료시스템은 정부 수립기에 전문의 중심 체계가 도입된 이래 ‘첨단기술과 고가장비, 대형병원 중심’ 시스템으로 고착되어 일차의료 발전에 불리

○ 미군정 하에서 전문의 중심의 미국식 의료제도가 도입된 이후, 각급 의료기관이 모두 전문의 주도의 첨단기술, 고가장비 중심 의료를 제공

○ 의원급 기관이나 중소형 병원을 이용할 장점이 부각되지 않은 상태에서 국민들은 대형병원을 선호하고, 첨단기술과 고가장비 경쟁이 심화되는 악순환

□ 공급자 간 경쟁의 정도가 높고, 이용자는 제약받지 않은 선택에 익숙한 시장환경 속에서 정부의 정책적 개입 여지가 희소

○ 다수의 전문의가 양성된데다, 빠른 경제발전과 자산가격의 상승 속에 의원급 기관이 병원으로, 종합병원으로 성장하면서 기관유형에 따른 기능 분화나 조율 없이 모든 수준의 의료기관이 환자유치 경쟁을 하는 특이한 경쟁구조 형성

○ 건강보험 지출 억제 외에는 별다른 의료정책 없이 의료시스템을 시장에 방치해온 과정에서 국민들은 의료기관이나 공급자, 치료방식을 자유로이 선택하는 것에 익숙해짐.

□ 정부와 의료공급자 간의 갈등 고조로 일차의료 강화를 위한 정부 노력이 공급자들의 협력을 끌어내기 어려운 상황

○ 단기간에 전국민 건강보험을 확대하고 비용을 통제하기 위해 정부는 설득과 근거확보보다는 효율적 의사결정에 의존

○ 심사평가가 강화되고 급격한 방식으로 도입된 의약분업 과정을 국가의 강권이라 인식

한 의료전문직의 피해의식 심화

○ 공급자측은 DRG 등 진료비 지불제도 개혁시도를 절대악으로 규정하고 이와 직접적 관련이 없는 정책에까지도 격렬히 저항하고 있어 일차의료 강화를 위해 필수적인 정부와 의료전문직 간 파트너쉽이 요원한 상태

2. 일차의료적 측면에서 우리나라 의료시스템이 당면한 문제

1) 만성질환 관리 미흡으로 인한 시스템 차원의 위기 가능성

□ 급속한 고령화에도 불구하고 '대형병원, 고가장비 위주 의료시스템' 속에서 일차의료적 개입이 필요한 질환을 관리하는 시스템 낙후

○ 대표적인 고령화 질환인 고혈압·당뇨 유병자 수는 현재 천만이 넘으며, 2040년에는 천팔백만을 초과하여 30세 이상 유병률이 46.9%에 이를 것으로 추정됨.

○ 고혈압·당뇨는 대표적인 성인병으로서 적정한 관리를 통해 증상을 일정수준에 통제할 수 있는 반면, 관리가 제대로 이루어지지 않을 경우 고액 중증 합병증에 이르게 됨.

○ 그러나 30세 이상 고혈압·당뇨 유병자 중 증상을 적정수준에 관리하고 있는 비율(조절율)이 고혈압 43.3%, 당뇨 29.7%에 불과해 합병증과 고액의료비 위험에 노출

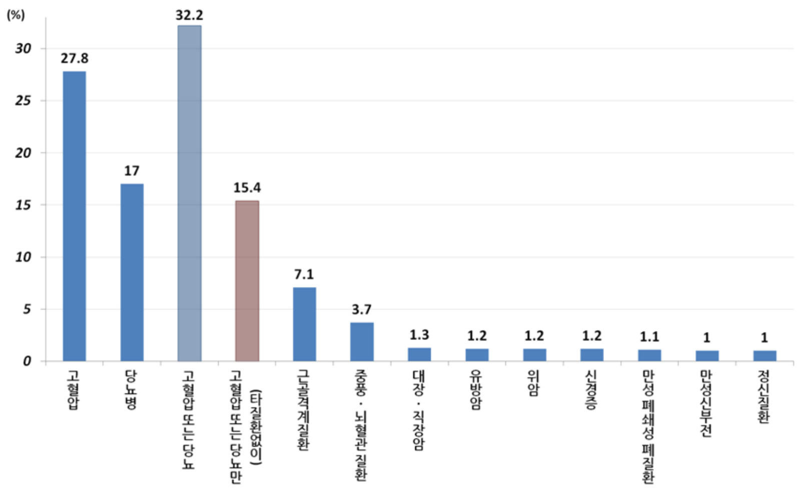
□ 고부담 의료비 가구 중 고혈압·당뇨를 보유한 가구 비중, 고혈압·당뇨와 함께 다른 질환을 가진 가구 비율 모두 높아 현재 부담과 미래 부담 측면 모두에서 이들 질환의 중요성을 나타냄

○ 재난적 의료비 발생 가구(소득 대비 10% 이상의 의료비 부담) 중 고혈압이나 당뇨 환자가 있는 비율이 32.2%

○ 고혈압·당뇨를 다른 장기질환과 함께 보유한 가구 비중도 16.8%에 이르러 고혈압·당뇨 자체가 의료비 부담을 초래하는 경우와 여타 합병증과 결합된 경우 모두 큰 비중일 것

○ 고혈압·당뇨 등의 만성질환은 현재의 의료비 부담에서 큰 비중을 차지하는 한편, 현재 증상 조절율이 극히 낮다는 점을 고려하면, 미래의 부담은 더 막대할 것으로 예상됨.

[그림 1] 재난적 의료비 가구의 주요 질환 보유 현황



□ 세계에서 가장 빠른 속도로 고령화가 진행되는 가운데, 이들 만성질환이 제대로 관리되지 않는 것은 향후의 재난적 상황을 예고하고 있으며, 의료시스템 전반의 재편 필요성을 나타냄.

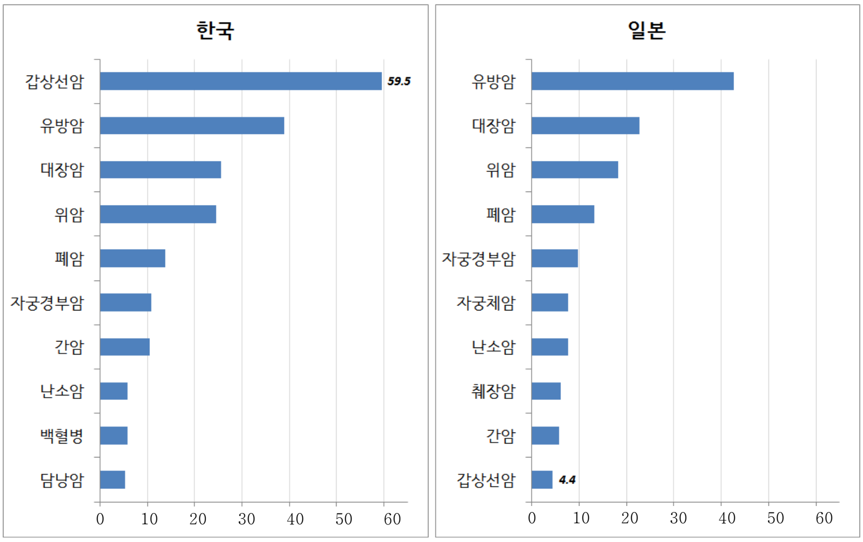
- ○ 향후 30년간 국민의 절반에 가까운 유병자가 예상되는 데도 이를 조기에 발견하고, 적절히 관리하게 하는 의료시스템의 기능이 미흡
- ○ 적절히 관리되지 않는 만성질환이 삶의 질 뿐 아니라 개인과 사회에 막대한 부담을 안길 것이 예상되나, 의료시스템의 특성과 그간의 갈등이 이를 대비하는 노력 자체를 어렵게 하는 상황

2) 조율기능의 부재

□ 만성질환 관리 등 필요한 기능은 미흡한 반면, 의료서비스 시장을 모니터하고 시장 오작동을 억제하는 의료정책이 미흡하여 불필요한 의료서비스 과다제공으로 인한 재원배분의 왜곡이 심각

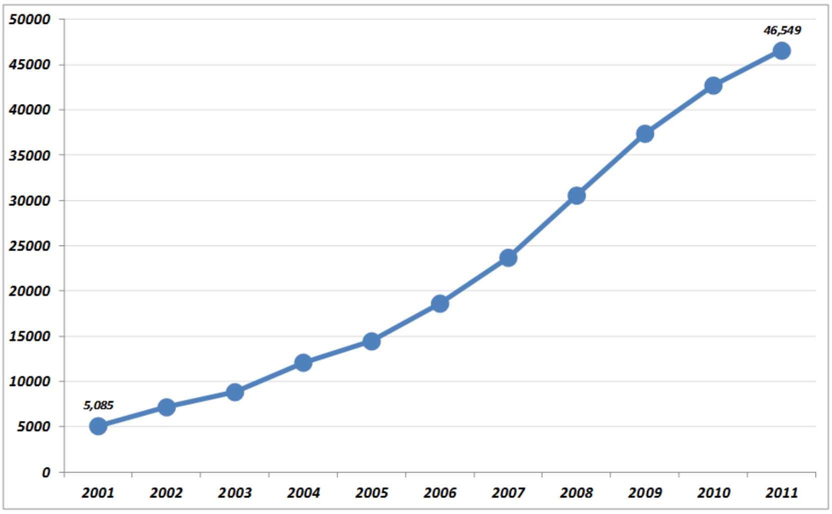
- ○ 경쟁적 시장은 공급자 간 협조와 조율을 어렵게 하여 불필요한 서비스가 과도하게 제공될 위험이 있으며, 시장을 모니터하고 통제하는 정책당국의 능력이 미흡할 경우 위험이 현실화
- ○ 근래 대표적인 사례로, 무증상 인구에 대한 초음파 검사의 확대로 한국 여성의 갑상선암 유병률은 2008년에 이미 일본의 14배에 이르렀음(그림 2).
- ○ 갑상선 수술 역시 급증하여 불과 10년 동안 입원 진료는 9배로 증가(그림 3)
- ○ 이러한 이상현상의 본질을 파악하기 위한 정책 인프라가 미흡한 결과, 관련 서비스를 조율하기 위한 정책적 개입이 이루어지지 않은 채 필요성이 모호한 이들 서비스로의 재원 편중이 그대로 방치

[그림 2] 한국과 일본 여성의 10대 암 유병률(2008)



주: 연령표준화 유병률(100,000명당).
자료: http://globocan.iarc.fr/

[그림 3] 갑상선암 입원 진료인원 추이(명)



자료: 건강보험심사평가원, 진료비통계지표 각 년도.

□ 국가 간 비교에서도 조율되지 않는 의료시스템의 입원 이용과다의 문제점이 드러남(표).

○ OECD(2011)에 따르면, 천식, 만성폐쇄성폐질환, 당뇨병 등 일차의료 수준에서 잘 관리하면 입원이 불필요한 질환의 입원율이 높음.

○ 이들 입원율이 높다는 것은 질병 초기 관리는 약하고 입원에 의존하는 정도가 높은 조율기능 취약성을 시사

〈표〉 일차의료 영역에서의 OECD 국가 중 상대적 순위

지표	우리나라 순위	자료 제출 국가 수
천식 입원율	3	28
만성폐쇄성폐질환 입원율	12	28
당뇨 합병증 입원율	3	24

자료: OECD, Health at a Glance, 2011

3. 일차의료 강화의 전략

□ 일차의료 강화를 위한 그간의 정책 시도의 실패요인 분석

○ 1989년 영국 시스템을 모방하여 진료권을 설정하고 환자의 흐름을 통제하려 시도했으나 환자들이 이에 순응하지 않고 진료의뢰서도 형식적으로 발급되어 사문화

○ 만성질환의 체계적 관리를 시도했으나, 이를 진료비 지불제도 전환의 전초전이라 인식한 의료계의 반대로 환자 등록, 환자 관리표 제출 등 핵심내용이 삭제되고 소액의 인센티브만 도입

○ 이러한 결과는 의료공급자 선택이 제한되는 것을 국민들이 받아들이지 않고, 의료기관 간 경쟁이 심하고 정부와 갈등수준이 높아 서비스 공급자들의 정책 순응도가 극히 낮다는 점 반영

□ 일차의료의 구체적인 형태는 각국이 당면하고 있는 의료시스템의 문제점과 정책유산에 의해 결정되기 때문에 특정 제도를 모방하거나 이식하려는 시도가 성공적이기 어려움.

○ 각국의 일차의료는 구성요소나 주체, 조직 등에서 다양한 형태를 취하고 있어 특정 모델이나 제도를 정형으로 꼽기 어려움.

○ 따라서 개선이 필요한 현재 우리의 문제점을 적시하는 것이 우리나라 상황에서의 일차의료 개념을 정립하는 데 필요

○ 기존에 사용됐던 의료정책에 대한 서비스 이용자와 공급자의 태도 역시 일차의료 개혁에 주요한 영향을 미치는 토양

○ 일차의료가 발달되어 있다고 인식되는 국가의 특정제도를 토양 차이에 대한 고려 없이 이식하려는 시도가 성공적이기 어려움.

□ 무엇보다 일차의료를 강화하는 노력은 고비용을 초래하는 의료서비스 부문으로 향하는 재원 비중을 줄이는 정치경제학적 개혁이라는 점을 인식할 필요

○ 기존 시스템에서 안정된 영역을 확보하고 있던 공급자 그룹의 저항이 가장 큰 장애요인이며, 기존 시스템에 익숙해져 있는 일반 이용자의 인식을 바꾸는 것도 중요

○ 의료시스템의 개혁은 국민의 의료서비스 행태를 일정한 방향으로 유도하려는 정책적 의도를 담고 있으나, 각국의 개혁 사례는 국민들의 반대나 무관심이 이해관계자의 반대를 뚫고 개혁이 성공하지 못하게 하는 주원인이라는 점을 보여줌.

○ 결국 의료시스템이 서비스공급자/이용자를 일관된 정책목표 하에서 인도해가는 방향성(directedness)과 국민의 선호를 반영하는 반응성(reponsiveness) 간의 균형을 잡는 것이 핵심

□ 따라서 일차의료를 강화시키기 위해서는 관련 지식기반(knowledge base)을 확보하고 새로운 모델을 적극적으로 시도하면서 그 우수성을 경험한 국민으로부터 선택받는 것이 중요

○ 각국의 개혁 시도는 강제적이고 급격한 정책시도가 성공하기 어려우며, 반면, 이해그룹 주장을 수용하기만 하면 개혁의 정신이 실종된다는 점을 보여주고 있음.

○ 선택제한에 대한 이용자의 수용성이 낮고 공급자 간의 경쟁이 심한 우리나라 의료시스템의 특성과 그간의 실패한 정책시도들은 비강제적이고 유인구조를 활용한 수단의 중요성을 나타냄.

○ 특히 정부와 공급자 간의 진료비 지불제도를 둘러싼 대립은 단기간에 이를 전환시킴으로써 일차의료를 강화시킬 방법을 강구하기 어렵게 함.

□ 만성질환 관리를 강화하고 재원배분의 왜곡을 개선하기 위해서는 특정 모델을 확정하기보다 다양한 시도 속에서 서비스 이용자가 기존 서비스 공급행태의 문제점과 개혁필요성을 인지하도록 환경을 조성하는 것이 필요

○ 포괄적이고 지속적인 만성질환 관리의 장점을 국민이 경험하고 지지세력이 될 수 있도록 이러한 서비스를 증진시키고 공급자에게 적절한 유인을 제공할 필요

○ 공공부문은 예방과 상담과 교육과 관리를 통합시키거나, 방문진료나 야간 콜, 복수진료과목 간의 협진과 공동개원, 서비스 표준 프로토콜 마련 등 새로운 모델을 주도적으로 시도할 필요

○ 새로운 비즈니스 모델이나 서비스 내용을 통해 수익을 창출할 의지가 있는 민간부문 공급자를 지원하여 풍부한 시도가 나타날 수 있도록 규제완화와 보조금 등을 활용

□ 새로운 시도들에 나타난 근거들을 축적하고 정책도구를 개발하면서 지식기반을 확충하는 지속적인 노력이 필요

○ 일차의료 강화를 위해 공급자에 경제적 유인을 제공하는 것이 필요하나, 이를 위해서는 위해서는 일차의료의 내용으로 무엇을 어떻게 측정할 것인지를 확정하고 자료제출 시스템을 확립하는 것이 시급

○ 진료비 지불제도를 둘러싼 정부와 공급자 간의 갈등 속에 근거축적을 위한 자료제출까지 진전을 이루지 못한 이상, 제도 개선에 대한 공감대를 형성하여 신뢰와 협력을 구축할 필요

Report

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Korea's Income Inequality: The Trend and major Issues

Kyungsoo Choi (KDI)

1. Summary and Major Findings

Korea's income inequality has grown by a large amount from 1992 to 2009. Its market income Gini coefficient rose from 0.205 in 1992 to 0.320 in 2009. Such is in fact a huge amount of inequality rise. In the same time period, disposable income Gini coefficient rose from 0.245 to 0.295. Taxes and transfers, which constitute the gap between market and disposable income, grew from 3% of market income to 5% of it, and cancelled about one-third of the inequality widening in the period. But still, it reduces market income Gini by just 12%, which is smaller than its redistributive effect in richer OECD countries, which are about one-third of total Gini index values, mainly contributed by tax and social contributions rather than public social transfers. In Korea, the gap between market and disposable income is not large and inequality, defined as disposable income inequality, is driven by market income inequality.

Korea's inequality widening the last two decades is not very exceptional among OECD countries, and other countries experienced similar inequality rise. What is exceptional is its timing. Korea's inequality growth continued in the 2000s, but in most of richer countries market income inequality rose in the 1970s and the 1980s and stabilized since the mid-1990s. The magnitude of inequality is comparable to the countries that recorded the highest inequality growth. Korea's market inequality rose by 28% from 1992 to 2009, and countries which experienced such a large increase are Italy, the U.K., and Japan. The U.S. and Norway experienced a rise of about 20%, and in Canada, Finland, Germany, Denmark, and New Zealand, the rise was about 15%. The duration of strong inequality rise is also similar. In most countries the event was about two decades long. In richer countries the period during which equalizing effects of taxes and transfers have expanded is in the 1970s and 1980s, and coincides with the period of market inequality rise. Hence it is not surprising that demands for social policies are growing in Korea currently.

By income deciles, Korea's market income widening is driven by widening bottom gap, and median and the top moved in a parallel fashion. In the early 1990s, both the bottom and top market income gap (D5/D1 and D9/D5) was about 1.8. In 2009, bottom gap is 2.6 while the top gap is 1.9. Such a pattern is created by a sluggish income growth at the bottom, while the median and top income group quickly recovered from the income loss during the economic crisis and continued their income growth. The bottom 10% (D1) did not achieve a real income growth from 1995 to 2010, while median income grew by 24% and top 10% (D9) grew by 30% during the same time period. Several richer OECD countries, especially those with growing financial sector, such as the US, the UK, Germany, Japan, Canada, Finland, Norway, and Italy experienced growing top income gap.1 That is, the middle group lost ground and top group gained. In Korea, such a trend is not found and median to mean ratio of market income do not show any clear trend. Korea's bottom income gap is comparable to unevenly distributed European countries such as the U.K., Spain, Greece, or Portugal, but significantly smaller than that of the U.S. Its upper income gap is smaller than the US, the UK, Spain, and Greece, and slightly smaller than that in Japan and comparable to European countries such as France and Germany. The effect of population aging on inequality is small, though it has strengthened. The difference in market

[1] OECD (2008), Figure 1.3, p.30.

income Gini between all individuals and excluding those in elderly households is 4%. Also, consumption inequality shows much less volatility without any clear trend.

Market income is the sum of labor income, business income, property income, and private transfers and contribution of each component can be identified if a simple decomposition formula of Pyatt, Chen, Fei(1980) is invoked. Such a decomposition allows us to infer which income source has driven the inequality widening. The decomposition result shows a disproportionate contribution of earnings in market income inequality widening. In fact about 80% of market income Gini coefficient value is contributed by earnings dispersion and the remaining 20% is contributed by business income, which includes self-employment income, and the contributions of property income and private transfers are very small as of 2010. Contribution of earnings has greatly increased in time. In 1995 earnings contributed 65% while business income contributed 35%. In richer economies, earnings' contribution is 80% or more, self-employment income contributes about 10% and the remaining is contribution of property income. But in the Korean data the share of property income is very small. The high share of business income is a result of Korea's high self-employment share.

The decomposition suggests that business income has contributed towards equalizing income distribution but if top income group is more carefully controlled, business income distribution seem to have been neutral in its effect on market income distribution. With the decline of unincorporated business and small firms, the share of business income in household income reduced without much effect on income inequality. In Korea, self-employment income is more dispersed and correlated with income than in richer countries, which implies that it is an important source of income for middle and low income groups.

If we calculate earnings distribution Gini among those with positive earning, and with ranking according to earnings level, inequality in earnings distribution has grown once and for all in the 1990s, more rapidly during the years following the crisis. And if we plot earnings dispersion among household heads, from 2003 to 2008 the right hand side of the distribution moved to the right while the left hand side remained where it is. Earnings of the middle to high earnings group grew, while low earnings group remained at their real earnings level. During 1990 to 1995 earnings distribution moved to the right without much change in its dispersion. Such changes occurred while the share of total earnings in national disposable income (NDI) stopped growing. The share of employee compensation continued to grow from the 1970s, but after hitting a peak in 1996 the rise became stagnant and the share is still below the peak level. In richer countries the share of labor peaked in the late 1970s and it trended down since then. Earnings dispersion has progressed while its relative share in income declined. In Korea, employee compensation as a share of NDI did not decline but did not increase either. As self-employment share is large and self-employment income (business profits to households) declined, if self-employment income is counted labor's share would have declined in Korea as well. Earnings dispersion and labor's share does not have a mathematical necessity relationship, but if we consider the forces behind the two phenomena and empirical evidences the two are very likely to be linked. As labor's share declines low wage earners for whom the demand is more elastic is likely to lose and globalization and technical progress, or deteriorating terms of trade, which drags labor's share is more likely to hurt unskilled labor more than the skilled. In Korea, wage structure change has been unfavorable to less skilled young workers. In the 2000s, there has been a strong trend of incorporation in service industry and the trend worked unfavorably towards the less skilled. Unincorporated businesses, which are small firms, lost ground and incorporations gained. Incorporated business workers increased by 2,852 thousands from 2000 to 2010, while their increase was just 235 thousand during 1993-2000, while unincorporated business which hired 659 thousand more workers during 1993-2000, added just 255 thousand workers during 2000-2010. As a result of this, small firms with 1-4 workers which accounted for more than half of total employment increase during 1993-2000, added just 10% of total employment during the 2000s. As small firms are the workplace for unskilled and low wage workers, such a shift implies weakening of labor demand for the unskilled workers. The driving force behind the accelerated incorporation trend is likely to be the renewed supply of capital and knowledge, as capital is released from policy loans and as business knowledge is accumulated from working experience at companies. As such as long as the capital and knowledge is within the economy, the incorporation trend is likely to progress further. The phenomenon is also related to the decline of household business income.

The share of business income in household income has dropped from 32.2% in 1995 to 23.4% in 2010. With the decline of self-employment, business income distribution remained unchanged between 2003 and 2008. That is, the self-employed experienced no growth of real income during the period. In the 1990s, business income shifted in a parallel fashion to the right even during the crisis period. During 1990-1995, the shift of income distribution is paralleled in earnings and business income. Both income moved to the right by nearly the same amount. But during 2003-2008, while labor income increased, business distribution remained unchanged. Despite the decline of small firms, the share of households depending on business income did not drop in the low income group. The decline of small firms and self-employment squeezed both labor and business income of low income groups. The share of property income is near 10% in richer economies but in the HIES (Household Income and Expenditure Survey) data set its share is tiny and less than 1%, and their contribution to income inequality is less than 0.5%. Form the data analysis property income cannot be properly addressed. In functional distribution of income, Korea labor income share became stagnant from 1996, if not fell. Shift of industrial structure did not have a lasting effect on labor income share. By institutional sector, household's income share in NDI fell as labor income share remained stagnant and household business profits, which are returns from unincorporated business, fell. The fall meant rise of the income shares of non-financial corporations and financial corporations. Income flow shift resulted in a huge amount of asset accumulation in non-financial corporation sector and abroad.

After the foreign currency crisis of 1997, the Korean economy has turned into a huge exporting machine. According to Hecksher-Ohlin model, if trade allows a country to specialize, a capital-rich country will specialize in the production of capital intensive goods and returns to labor, would gradually decline. And empirical analysis on falling labor income share reveals that labor's share can drop because of higher capital-output ratios, higher real price of oil, stronger technological progress, and marginally greater adjustment cost of labor and lower bargaining powers of workers. If we admit that forces behind a declining labor share would raise inequality, policies that can prevent labor income share decline would be the policies for raising labor income share.

In the longer run, maintaining a favorable terms of trade and preventing its deterioration should be made a policy priority. With globalization, raw material price rise and tighter international competition can deteriorate Korea's terms of trade condition. Korea has been lucky in that it had relatively scarce resources of cheap and high quality labor, capital inflow and adaptive skilled personnel, and ICT at different stages of growth. In the next decades Korea's comparative advantage should be knowledge and an advanced science and technology would be required among others. Up to now Korea's R&D has been narrowly focused on industrial technology but if the area is not extended to basic science and service R&D, Korea's comparative advantage might disappear, deteriorating terms of trade and lowering labor's share and raising inequality.

The current trend of incorporation, despite its negative effects on the less skilled and income inequality is likely to be continued, as the resources that fuels the trend is within the economy. However, if restructuring in the areas that does not harm general economic efficiency greatly can be controlled or slowed down, that can help for the less skilled to adopt to a new environment.

Labor market deregulation has some effect in reducing wages and raising employment. But for labor's share to rise as a result, the positive impact on employment would have to be greater than the negative impact on wages. Blanchard and Giavazzi (2003, p.905) argue that the decline in labor's share shows that the effects of 'labor market regulation, at least in the sense of a decrease in the bargaining power of workers, must have dominated the effects of product market deregulation'. Labor market deregulation need to be progressed in tandem with product market deregulation.

2. Income Inequality Trend

1) Market and disposable income inequality

Korea's income inequality has continued to rise since the 1990s and the cumulated size of increase is huge.[2] The Gini coefficient of market income, on an individualized and yearly average basis, among urban families with two or more members stood at 0.266 in 1990. But it rose to 0.279 in 2000, and currently stands at 0.315 as of 2010. The Gini coefficient trend of

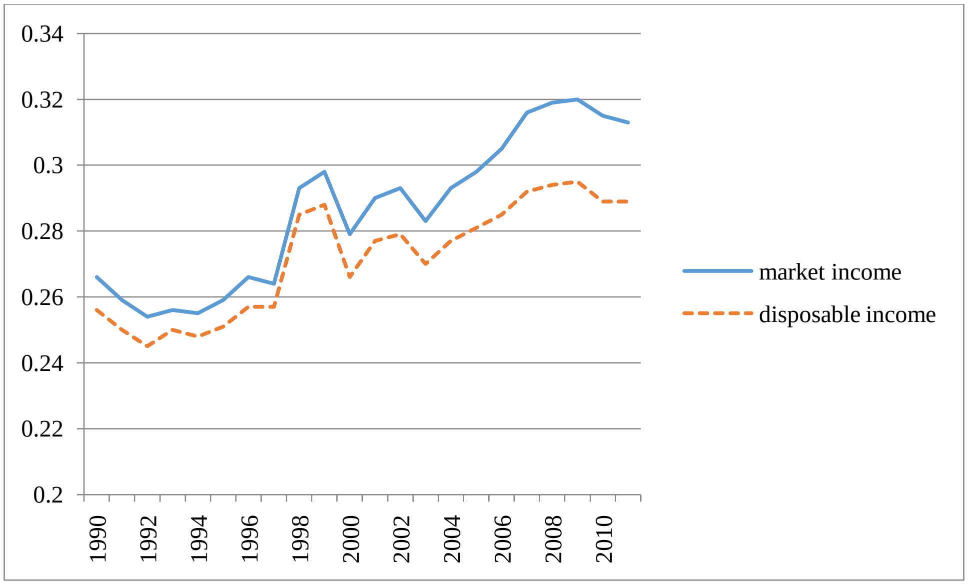
[2] Blackburn (1989) claimed that an increase in Gini coefficient of 2 percent points (0.02) is equivalent to a (hypothetical) lump sum transfer of 4% of average income from all those below median to all those above it.(OECD, 2008, p.28)

disposable income distribution has a similar trend. It stood at 0.256 in 1990, reached 0.266 in 2000, and stands at 0.289 in 2010.

The rising trend has been persistent throughout the last two decades. As Figure 2.1 below shows, the Gini coefficients rose almost in a linear fashion from its lowest point in 1992 to its peak in 2009. Inequality widening accelerated during the economic crisis period of 1998-99 and temporarily stopped as the crisis subsided in 2000. However, the underlying forces for inequality widening did not disappear with a recovery from the crisis and continued to push the Gini coefficient values upwards from the year 2000. With the ending of the Asian Financial Crisis it is widely anticipated that the rising trend would curb and inequality level would stabilize, but despite popular wishes, income distribution continued to deteriorate until 2009. Recently the rising trend seems to have stopped and even turned around a little bit. But the decline since 2010 is largely due to a slowdown of property income growth that affected higher income group more than lower income groups. It is premature to presume that Korea's inequality has passed its peak. The inequality trend during the past two decades can be best characterized as a secular rise interrupted by macroeconomic events.

Evidences for the two decade long inequality widening is consistent across different measures. Among non-agricultural sector families with two or more members, for which inequality measures are available from 2003, the market income Gini coefficient rose from 0.292 in 2003 to 0.314 in 2010, after registering a peak of 0.323 in 2008. Among all families inclusive of one person households, for which a series is available from 2006, the market income Gini rose from 0.330 in 2006 to 0.341 in 2010.

Figure 2.1. Market and Disposable Income Gini Coefficients: 1990-2011



Note: individualized yearly disposable income base, among members of families residing urban areas and with sizes of two or more members.

Source: The Statistics Korea, KOSIS database (www.kosis.kr)

Korea's income distribution statistics are announced by its national statistical office, the Statistics Korea. The statistics are based on a survey conducted by itself, entitled 'the National Household Survey' (previously 'the Household Income and Expenditure Survey'). The survey compiles monthly records of households' income and expenditure for a sample consisted of about 8,700 households (in 2010) across the nation. The sample is comprised of urban and rural stratification with a little different sampling scheme. The survey has been first conducted in 1963, and micro data sets are available for research purposes from 1982. Family income and expenditure statistics are announced quarterly on family bases. The published yearly statistics are averages over quarterly means of income decile groups.

For inequality measures, the Statistics Korea adopts a different procedure to facilitate international comparisons. Income inequality statistics are based on individualized annual incomes. Household incomes are individualized with an equivalent scale of the square root of the household size. That is, family incomes are divided by the square roots of family sizes and the divisions are assigned equally to all family members. To annualize family incomes, the Statistics Korea uses average monthly incomes of families. The procedure is compatible with the OECD practice. The series is available from 1990 and the yearly micro data sets are available to researchers.

There are also some differences in the scope of income counted between the household income and expenditure statistics and inequality statistics. The income in household income and expenditure statistics includes all types of income that accrue to the household, whether they are regular or irregular, where irregular income mean ad hoc income such as celebration or condolence money or lump sum payments such as retirement allowance. In inequality statistics irregular incomes are not counted and they are treated as change of assets as realizations of past savings or contributions. Inequality statistics includes market income and disposable income categories. The Statistics Korea follows the recommendations of the final report of the Expert Group on Household Income Statistics (2001), alias the Canberra Group, in income definition. The report defines market income as households' total revenue from labor and investment activities and it includes all types of earnings gross of employees' social insurance contributions, self-employment income, all types of capital income including interest, rent, or dividends received and subtracting interest paid, plus private pensions. According to the report, disposable income takes market incomes and subtracts direct taxes (including social insurance contributions); then it adds regular inter-household cash transfers net of those made, and all forms of cash and near-cash public income transfers including social insurance benefits, universal social insurance benefits, and targeted income transfer programs like social maintenance.

As Figure 2.1 shows, income inequality widening is driven mainly by rising market income inequality. The contribution of tax and transfers in alleviating inequality has grown, especially after the 1997 economic crisis as social security programs expanded, but the widening effects of market income inequality has been much stronger than their countering effects. Hence, in this paper, I focus on the sources of market income widening during the last two decades.

If a simple decomposition formula of Gini coefficient into sources of income attributed to Pratt-Chen-Fei (1980) is invoked, the contribution of market income and tax and transfers in widening disposable income inequality can be evaluated. A more detailed explanation on their decomposition method (P-C-F) is given in section 3, but if I introduce a simple form, the decomposition is as follows. Let $y = x_1 + x_2$, where y is market income, x_1 is disposable income and x_2 is tax and transfers. And let $\hat{y}$ be grouped means of individual market incomes and denote grouped means of x_1 and x_2 with tilde upon them. Then the Gini coefficient of grouped market incomes $G(\hat{y})$ can be expressed as a weighted sum of the two concentration ratios of component incomes where the weights are shares of the component in total income. A concentration ratio of a variable z with respect to t, $C(z/t)$ is a measure of concentration of the distribution of z when observations are ordered according to the size of t. For our purposes, we can tentatively consider it as a measure close to the Gini coefficient measure.

$$G(\hat{y}) = \phi_1 C(\tilde{x}_1/\hat{y}\,) + \phi_2 C(\tilde{x}_2/\hat{y}\,),\ \phi_k = \bar{x}_k/\bar{y}$$

The KOSIS database, from the Statistics Korea, lists group means of market income and disposable income in quintile groups. The decomposition in equation (1) can be calculated from these published statistics. The amount of taxes net of transfers for each group is calculated from the table as the difference between market and disposable income. Table 2.1 gives the result. The first column is the derived market income Gini coefficients for the years 1992, 2000, and 2009 computed from the published quintile income group means. 1992 and 2009 are the years when Gini coefficients have the bottom and peak values. The year 2000 is chosen as a mid-point year. The published official Gini coefficient values, in the right hand side columns, are 0.254, 0.279, and 0.324 in the corresponding years. As the official Gini coefficient values are derived from decile income group means, the computed Gini values underestimate official figures as computation uses a coarser income groups.[3] The second and third columns are shares of disposable income and taxes net of transfers in market income. The share of taxes net of transfers in market income is about 3% in the 1990s before the economic crisis. With the post-crisis expansion of social expenditure, the share became 5% of market income. The share is roughly constant during the 2000s at around 5%. The fourth and fifth columns show how market income inequality rose. From the decomposition formula, sum of the two columns exactly matches the computed Gini coefficient. The concentration ratio of disposable income weighted by its income share($\phi_1 C_1$) grew from 0.222 in 1992 to 0.238 in 2000, and to 0.264 by 2009. Unweighted concentration ratios (C_1) are 0.229, 0.249, and 0.277 and official disposable income Gini coefficients in corresponding years are 0.245, 0.266, and 0.295. Hence concentration ratios are close to Gini coefficients. From 1992 to 2009, contribution of taxes net of transfers to market income Gini rose from 0.015 to 0.036. Thus incidence of taxes net of transfers has become more unequal, contributing to reducing inequality.

Increases from 1992 by components are shown in columns 6 to 8. Market income Gini rose by 0.024 in 2000 from its 1992 value and by 0.063 in 2009. If the distribution of taxes net of transfers had not become more unequal, a corresponding rise would have occurred in disposable income Gini. Taxes (net of transfers) reduced the increase of disposable income Gini by approximately one-third. The average size of net transfers in the bottom quintile income group

3 A coarse grouping always underestimates Gini value from a finer grouping. See Pyatt, Chen, Fei (1980), p. 458.

grew sizably. In 2000, the average amount was a mere 5,000 won per month per person (or -5,000 won in terms of net tax). But in 2010, it is 84,000 won per month per person. In the same period, net tax paid by the top income group rose from 139 thousand won per month per person to 311 thousand. Thus, the contribution of tax and transfers to equalizing disposable income distribution is significant and has grown rapidly during the last two decades. However, disposable income inequality has been widened by market income inequality rise.

Table 2.1. Decomposition of Market and Disposable Income Inequality: 1992, 2000, 2009

	Decomposition results								**official Gini index**	
	Gini	ϕ_1	ϕ_2	$\phi_1 C_1$	$\phi_2 C_2$	ΔGini	$\Delta\phi_1 C_1$	$\Delta\phi_2 C_2$	Market	Disposable
1992	0.237	0.969	0.031	0.222	0.015	0.000	0.000	0.000	0.254	0.245
2000	0.261	0.954	0.046	0.238	0.024	0.024	0.016	0.009	0.279	0.266
2009	0.300	0.954	0.046	0.264	0.036	0.063	0.042	0.021	0.324	0.295

Source: author’s calculation from published KOSIS database.

In richer OECD countries Gini coefficients of market income grew from the mid-1970s to the mid-1990s. But the rising trend generally halted from the 1990s and market income Gini coefficient values have been stable since until recently. The rise of market income inequality has been common and large in magnitudes. OECD (2008, p33) lists market and disposable income Gini changes from a base year, and according to the table, in Italy, the UK, and Japan, market income Gini rose by about 30% from 1985 to 2005 (or from 1975 to 2005 in the UK). In the US and Norway, the rise was about 20%, and in Canada, Finland, Germany, Denmark, and New Zealand it is around 15%. Market income inequality rise is not universal, and countries like France, Australia, the Netherlands did not experience an inequality rise. Korea’s market income Gini growth from 1992 to 2009 is 28% and although the growth is among the largest, it is not exceptional, considering that Korea has experienced a severe economic crisis during the period. Major difference is in the timing of inequality growth. In richer countries market income inequality growth was an event in the 1980s and up to the mid-1990s, and growth after 1995 has been very mild. Among the 16 countries in the OECD (2008, p.33) Figure 1.4, only Italy, Japan, Germany, and Norway experienced a significant market income inequality widening from 1995 to 2005, and the magnitude is around 10%. Other countries experienced a very mild or insignificant inequality rise. Korea is exceptional in that it experienced a very large inequality growth in the period. In disposable income distribution, Czech, Finland, Norway, Sweden experienced a growth of inequality near 10% or higher. But except for Norway, the rise was not accompanied by a commensurate rise in market income inequality. In these countries, disposable income inequality was driven by taxes and transfers other than market income, such as social security retrenchment, and not by market income, unlike in the case of Korea.

After looking at Figure 2.2, one might ask whether this graph implies that Korea's market income inequality widening is now over. It is very premature to answer this question, but I think there is a possibility, because the facts match well. For instance, market inequality widening in richer countries was a two decade long event, from the mid-1970s to the mid-1990s or in the 1980s and 1990s; the widening is almost two decade long in Korea. In richer countries, market income Gini coefficient grew by 20 to 30%; in Korea it grew 28% up to now. In richer countries, labor's share in income has declined since the mid 1970s; in Korea labor's has been declining since the mid-1990s. Earnings dispersion in the population with positive earnings is not growing as rapidly as before recently (Figure 3.1). Household income share continues to fall as self-employment and small businesses lose grounds but as the pace of it slows down, the downward trend may become milder. Hence it might be that Korea is near the end of a period of rapid market income inequality growth.

Figure 2.2. Gini Coefficients of Market Income in Richer Countries: 1985-2005

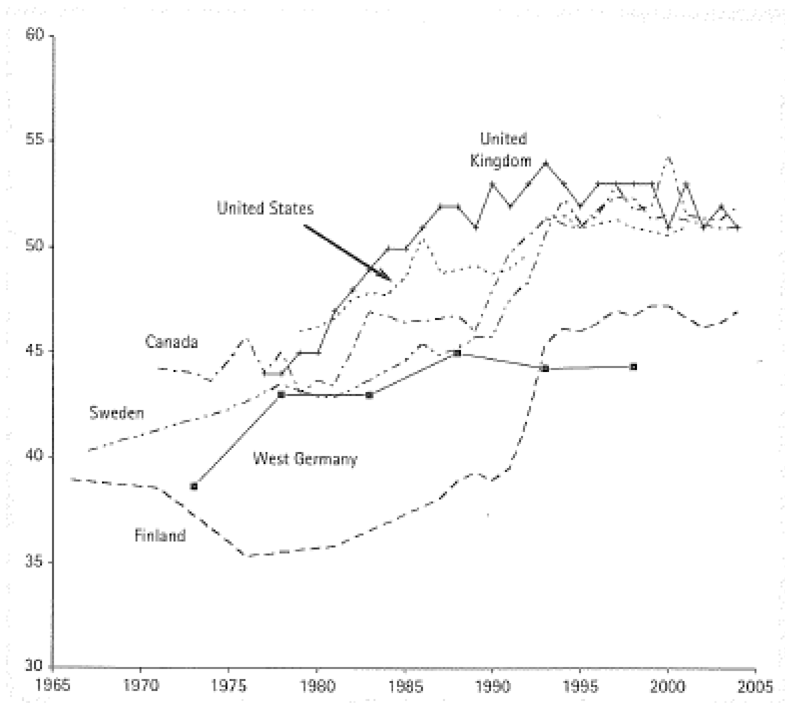


Fig. 4.2. Gini index of market income (percent)

Source: Brandolini and Smeeding (2009), Figure 4.2, p.83

In richer OECD countries, the equalizing effect of taxes and transfers, which are the gap between market and disposable income, is stronger than that in Korea. In Korea it is measured as 12% in 2009 in Table 2.1 (= $\phi_1 C_1 / G(y)$). It was just 6% in 1992 and 9% in 2000. In most European countries it is about one third, in the US, it is 23%, and in Taiwan it is 9% as of 2000.4 The major part of the equalizing effect comes from tax part of taxes and transfers in market income. Taxes are much more unequally distributed than public social transfers and have a larger equalizing effect. Brandolini and Smeeding (2009, Table 4.2, p.90-91) gives their own calculation of contributions of taxes and transfers to market income Gini coefficients. Table 2.2

[4] Brandolini and Smeeding (2009), Figure 4.6, p.93, lists reduction in market income Gini index by taxes and transfers for 16 countries from their own calculation based upon the LIS database. The results are as follows, as of 2000 unless indicated otherwise: Denmark 47%, Netherlands (1999) 39%, Finland 48%, Norway 39%, Sweden 45%, Czech (1996) 41%, Germany 43%, Romania (1997) 27%, Switzerland 30%, Taiwan 9%, Poland (1999) 41%, Canada 28%, Australia (2001) 34%, UK (1999) 33%, Israel (2001) 33%, and US 23%.

presents their results in terms of percentage of market income Gini coefficient. In Finland and Sweden, taxes and transfers, inclusive of private transfers, have reduced disposable income Gini coefficient from market income coefficient by 36%. In these countries both the shares of taxes (near 40%) and public social transfers (33%) are high in disposable income and the contribution of taxes and transfers in reducing market income inequality is large. But a larger contribution to lowering market income inequality is done by taxes and social contributions than public social transfers or private transfers. Taxes and social contribution lowered 36% of market income Gini coefficient, where contribution of public social transfers is 8%. The situation is similar in UK and US. Most of the market income inequality reduction done by taxes and transfers are contribution of taxes and social contributions.

Table 2.2. Reduction of Market Income Gini Coefficient by Sources (%)

	Finland	**Germany**	**Poland**	**Sweden**	**Taiwan**	**UK**	**US**
taxes and transfers	-43.1	-37.1	4.0	-44.5	-7.1	-31.9	-30.7
private transfers	0.2	-0.4	2.4	-0.6	-0.4	0.4	0.3
public social transfers	-7.7	-0.9	14.8	-7.6	1.0	-9.3	-0.1
taxes, social contributions	-35.6	-35.7	-13.2	-36.3	-7.8	-23.0	-31.0

Note: as of 2000, except for Poland (1999) and UK (1999) based on the LIS data sets.

Source: author's calculation from Brandolini & Smeeding 2009, Table 4.2, p.90-91.

In most of richer OECD countries, the equalizing effects of taxes and transfers have strengthened from the 1970s to the 1980s as market income inequality widened (Figure 2.3). The specific timings and magnitudes of increases differ across countries, but by the mid 1990s the equalizing effects are far greater than what they used to be in the 1970s. Generally the timing of expansion of the taxes and transfers programs matches market income inequality widening. The general pattern is such that as inequality widens, demands for equalizing programs build up, and government reacts to the programs. In view of this, it is quite natural that in Korea demands for social welfare grows in response to rising income inequality.

Disposable income inequality is market inequality mitigated by such taxes and transfer programs. In richer OECD countries, disposable income inequality is generally higher than in the previous decades but there are wide variations in timing and size of disposable income inequality rise such that the trends are much more diverse and no single overarching explanation of the trend can be derived (Figure 2.4).

Figure 2.3. Equalizing Effect of Taxes and Transfers in Richer Countries: 1985-2005

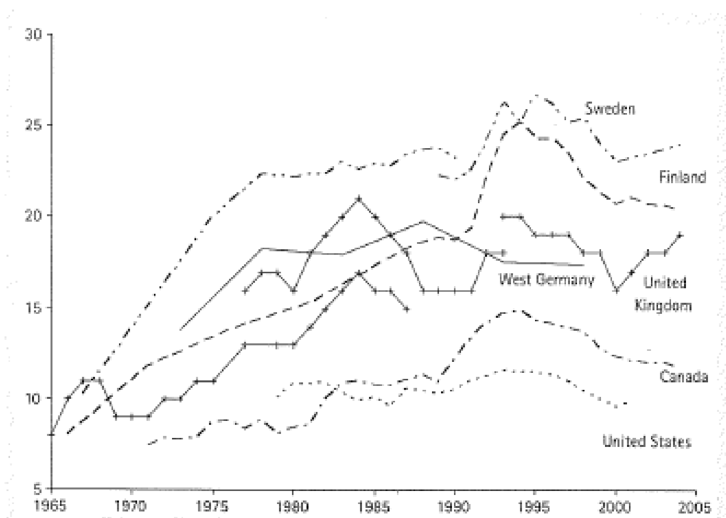


Fig. 4.7. Equalizing effect of taxes and transfers: absolute difference between the Gini index of market income and the Gini index of disposable income (percent)

Source: Brandolini and Smeeding (2009), Figure 4.7, p.94

Figure 2.4. Gini Coefficients of Disposable Income in Richer Countries: 1985-2005

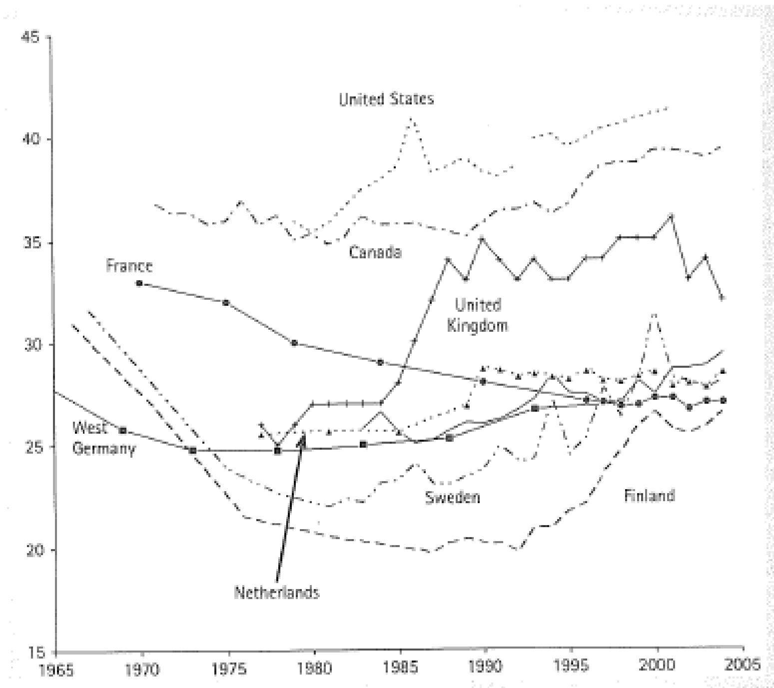


Fig. 4.5. Gini index of disposable income (percent)

Source: Brandolini and Smeeding (2009), Figure 4.5, p.88

2) Income decile ratios

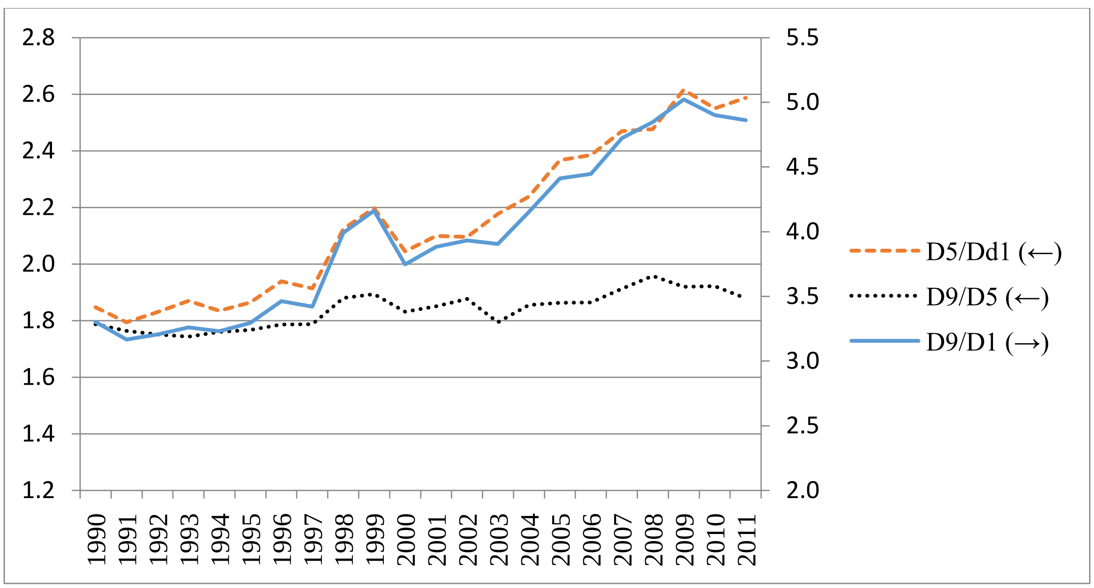
The trend of income decile ratios can provide a more detailed description of how income inequality has widened in Korea.5 Figure 2.5 shows the trend of income deciles ratios. The ratio between top 10% to bottom 10% income level ratio, the D9/D1 ratio, has grown from 3.3 in 1990 to 5.0 in 2009 among families with two or more member in urban area. The widening has been driven mainly by the income gap at the bottom. The middle to bottom gap (D5/D1) expanded from 1.8 to 2.6 from 1990 to 2009, while the top to middle gap (D9/D5) remained largely stable throughout between 1.8 and 2.0. In fact, if scaled properly, the D5/D1 line almost completely overlaps with the D9/D1 line. The pattern implies that Korea's inequality widening can be

[5] Income deciles are income levels at decile points such as 10%, … , 90% percentiles. As they are income levels at decile points, they are not sensitive to incomes at both ends of the distribution.

almost completely accounted for by what happened at the lower half of the distribution. And the trend has accelerated after the economic crisis.

Figure 2.5 describes market income deciles ratios, but disposable income deciles ratio trend is very similar to this. This can be easily guessed as disposable income is not much different from market income and the gap has not changed much in Korea. Disposable income deciles ratios have a similar pattern, just a little downscaled. For example as of 2009, its D9/D1 ratio stands at 4.2, D9/D5 at 1.9 and D5/D1 at 2.3. In 1990, they stood at 3.2, 1.8, and 1.8, respectively.

Figure 2.5 Trend of Market Income Deciles Ratios - D5/D1, D9/D5, and D9/D1: 1990-2011



Note and Source: same as in Figure 2.1.

The major reason for the widening of middle to bottom income gap is the sluggish income growth at the bottom. Table 2.3 lists real income levels at decile points of D1, D5, and D9 in 1990, 1995, 2000, 2005, and 2010. The figures are from the Statistics Korea, and average monthly income individualized by adjusting family income with an equivalence scale of square-roots of family sizes. At the bottom, market income did not increase in real terms from 1995 until 2010. Tax and transfers compensated their income loss but their disposable income in 2010 is barely at their 1995 level. Such change is in a great contrast with what happened in their income status previously between 1990 and 1995 and shows how income gap widening in Figure 2.1 has progressed. The lowest income group has not fully recovered the pre-crisis income level yet.

On the other hand, the median and the top achieved a sound income growth after the crisis after suffering an income loss during the crisis. The median income is 2% lower in 2000 than five years previously but achieved an 18% growth during the next five years. Top income grew by 21% in the same period. The median and top income grew roughly in a parallel fashion as Figure 2.5 shows, although their growth appreciably curbed in the second half of the 2000s because of the global financial crisis in 2008. Such a gap in income growth between low- and middle to high income groups resulted in a widened bottom income gap and a stable top income gap shown in Figure 2.5. After the economic crisis in 1997, the 'trickle down' effect in income distribution has significantly weakened.

Table2.3. Monthly real market and disposable income by deciles (individualized)

(unit: 2010 constant 000 KRW)

	Market income			**Disposable income**		
	p10	p50	p90	p10	p50	p90
1990	494	912	1,631	495	889	1,564
1995	757	1,411	2,494	752	1,371	2,387
2000	674	1,379	2,525	678	1,319	2,377
2005	690	1,634	3,043	710	1,555	2,817
2010	671	1,712	3,290	747	1,642	3,049

Note and Source: same as in Figure 2.1. Nominal incomes are converted to real incomes using the same scale as those used in household income and expenditure statistics.

Brandolini and Smeeding (2009, Figure 4.3, p.84) lists their own estimates of decile ratios of disposable income as of 2000 for countries available from the LIS data sets. Compared with their estimates, Korea's 1990 disposable income D5/D1 ratio of 56% is roughly the same size as those in relatively evenly distributed European countries. However its 2010 level of 46% is comparable to those in unevenly distributed European countries such as the U.K., Spain, Greece, or Portugal, but significantly higher than the U.S. level of 39%. At the top, Korea's top to middle income ratio of 186% as of 2010 roughly corresponds to those in medium level countries such as Germany (180%) and France (188%). But it is higher than those in evenly distributed European countries in the northern Europe, which are between 160% and 170%. Korea's top to middle income gap is smaller than those in high top income gap countries such as the US (210%), the UK (215%), Spain (208%), and Greece (205%), and slightly lower than that in Japan (192% in 1992). Its size is comparable to more evenly distributed European countries such as France (180%), Germany (183%), and Sweden (163%). In an international comparison, Korea's income distribution has a relatively uneven lower end distribution.

3) Inequality among working age population

Income inequality is higher among the elderly population in Korea. Hence population aging can push up Gini coefficient value. As Korea's population aging is progressing rapidly recently, aging can cause an apparent inequality growth. To check for existence of population aging effects, we can measure Gini coefficient among population under age 65 and compare the trends. As the Statistics Korea does not announce Gini coefficients for population under 65, we need to directly estimate from micro data sets. In the HIES data set, households whose head's age is 65 or more marked as 'elderly households.' Thus, Gini coefficient for population under 65 can be measured from the sample eliminating the elderly households. If we use this method, all individuals living in a household whose head is elderly is excluded from the sample.

To do this, we need to reproduce the published official Gini coefficients from the data sets. The Statistics Korea defines 'market income' as a sum of labor income, business income, property income, and private transfers (http:\\www.kosis.kr). There is a little difference between their definition and that in Canberra report, in that the Korea Statistics includes private transfers and excludes private pension payment. In the HIES data if I define market income as the sum of labor, business, property income plus 'transfers across households,' 'discounts,' and 'other transfers,' among private transfers, I get very close estimates for inequality related statistics to the official statistics.6 In deriving Gini coefficients I use decile income groups.

Table 2.4 reports the estimation results. Gini coefficients derived from a sample that excludes elderly households are just a little bit smaller and the difference is marginal. As of 2010, Gini for all population is 0.309, while among working population it is 0.296. When elderly households are excluded market income Gini reduces by 4%. The gap between all population and non-elderly household population grew with time as aging progresses. In 1990, the difference is 0.2%, in 2000 it widened to 1.2% and in 2010 it is 4.2%.

Table 2.4. Population Aging Effect in Market Income and Consumption Gini Coefficient

	Market income Gini		**Consumption Gini Market income ranking**		**Consumption Gini Consumption ranking**	
	All population	**Head age < 65**	**All population**	**Head age < 65**	**All population**	**Head age < 65**
1990	0.261	0.260	0.186	0.186	0.261	0.260
1995	0.254	0.251	0.156	0.155	0.243	0.241
2000	0.274	0.270	0.175	0.173	0.239	0.237
2005	0.293	0.287	0.167	0.165	0.232	0.229
2010	0.309	0.296	0.168	0.161	0.240	0.234

Note: among urban households with 2+ members.
Source: author's calculation from yearly HIES data sets.

[6] For example I obtain a Gini coefficient value of 0.309 from the data sets for urban households with 2+ members, while the official statistic is 0.315. Calculated values are smaller than official statistics by approximately 0.005 consistently throughout from 1990 to 2010.

In richer OECD countries, the Gini coefficient of disposable income is generally lower among the elderly population. (OECD, 2008, Figure 2.3, p.63) Only Korea and Mexico is listed as countries where individuals over 65 have a significantly higher disposable income Gini than the population in the working age of 18 to 64. The difference is explained by less mature pension system in the two countries. In richer countries, pension payments constitute a main part of elderly income, and as pensions have smaller dispersion Gini coefficient of disposable income is smaller among the elderly.

4) Consumption inequality

Consumption can be a better proxy of well-being than income, as it is less volatile being a function of permanent income. Also, in less developed economies reporting can be more reliable in consumption. Table 2.4 above lists estimates of consumption Gini coefficient derived in the same way as market income Gini. When individuals are ranked according to their level of market income, the Gini coefficient shows no trend, remarkably. The level of inequality is lower than that of income because low income household have higher propensity to spend, but its trend is mildly downwards before the 1997 crisis, upwards in the aftermath, and then declined and stabilized. Throughout, not much variation is observed. The gap between all individuals and those in elderly households is smaller than income and grows at a mild pace, as expected. When individuals are ranked according to their consumption level, Gini coefficients of consumption generally trended down until 2003 and then turned its direction and increased. However the movement is very mild throughout.

The trend implies that the gap in consumption-income ratio across income groups has widened, and the KOSIS data base confirms this (Table 2.5). The ratio of consumption to household regular income rose among low income groups and fell among higher income groups.

However, an inference on the consumption pattern change by income groups requires further investigation.

Table 2.5. Household Consumption / Regular Income Ratios by Quintile Income Groups (%)

	All groups	1st	2nd	3rd	4th	5th
1990	67.1	86.0	71.6	67.5	65.0	61.9
1995	62.7	86.5	69.5	64.6	61.1	54.3
2000	70.7	99.2	78.0	73.5	68.1	62.3
2005	67.4	104.8	80.3	70.6	64.0	56.6
2010	65.5	103.7	76.8	69.8	63.9	54.2

Source: Statistics Korea, KOSIS data base.

3. Contribution to Inequality by Income Sources

1) Income inequality and its sources

In order to identify the factors that have driven market income inequality growth, this section looks into contributions made by different sources of income. Market income is a sum of its source incomes of earnings, business income, property income, and private transfers. And its Gini coefficient can be represented as a weighted sum of concentration ratios of each component, where the weights are income shares of the income source in total market income and a concentration ratio measures how unequally a variable is distributed like a Gini coefficient but when the variable is ranked according to some other variable, which in this case the market income. A decomposition of inequality into contributions from different sources constitutes a key step in identifying the driving forces of inequality widening.

In richer economies, it is a well established fact that the dominant driving force behind increased income inequality during the last decades is increased earnings dispersion. (Gottschack and Smeeding, 1979; Blau and Kahn, 2009) Commonly cited causes for larger earnings dispersion are skill-biased biased demand shift that favored the skilled and are unfavorable to the less skilled, increased international trades and globalization, and mobility of capital across borders, and expansion of financial sector. Household earnings, or labor incomes, constitute a major portion of household income in richer economies. Hence, one may be led to think that it is obvious that income inequality is driven by earnings dispersion. But there are other candidate factors as well such as family structure change, age structure, the share in the population with no income, and business and property income etc.

The share of wages in national income has dropped in the decades following the 1980s in most advanced countries.7 According to an OECD account, the share of wages in value added (measured as total compensation off employees and the self-employed valued at the business compensations rate) dropped by around 10 percentage points from 1976 to 2006 across 15 OECD countries. (OECD, 2008, Box 1.2, p.35) However, household income is consisted of those incomes that accrue to households and they are not equal to national income. In discussing income inequality we will focus upon the income that accrue to households and are sources of household income.

Among Korean households self-employment income is a much more important income source of a household compared to richer economies because self-employment share in employment is high in Korea. The share of business income in total household market income was around 30% in the 1990, though it is now below 25%. International comparison of shares of business income in family income is difficult because part of business income for the self-employed are treated as earnings in some countries, but from the difference in employment structure one can expect that contribution to inequality by source might be different in Korea and richer OECD countries. Further, the decline of self-employment and small firms has been one of the major features in the post-crisis economic development, which accompanied inequality rise.

[7] Empirical analysis of the determinant at the industry level points higher capital-output ratios, higher real price of oil, stronger technological progress, as well as weaker bargaining power of workers and greater adjustment cost of labor. (OECD, 2008, p.35)

It is also one of main policy concerns of successive governments as the decline is regarded as affecting low income groups disproportionately. Another reason why self-employment and small business income is at issue is that small businesses belong to an area where policies and regulations can make a meaningful difference in their fates, unlike technological progress or globalization, the trend of which is beyond a government's control.

In next subsection section, I introduce a decomposition formula for a Gini coefficient attributed to Pyatt, Chen, Fei (1980), followed by a decomposition result. In subsequent subsection, I look into inequality development in each of the sources.

2) Gini coefficient decomposition formula

When total income is a sum of incomes from different sources, contribution of each component income distribution to total income Gini efficient can be conveniently calculated by Pyatt, Chen, Fei (1980)'s decomposition formula. As household incomes are composed of incomes from different sources, and inequality in incomes development differently, contribution of each source income distribution to overall income distribution inequality can be derived by invoking their formula. In particular, contribution of labor income distribution to total income inequality can be identified by the decomposition.

Denote total income of family i as y_i and the contribution of factor component k (e.g. labor income) to the total family income as x_{ik}, then total income is made up of m factor components, where there are n families.

$$y_i = \sum_{k=1}^{m} x_{ik} \text{ for } i = 1, \dots, n$$

and the average total income is the sum of averages of m income components.

$$\bar{y} = \sum_{k=1}^{m} \bar{x}_k$$

Suppose that there are two income components, t_i and z_i, and families are ranked according to the sizes of the income component t_i. Denote a family's rank as $r(t_i)$, where $r(t_i) = 1$ for the family for which t_i is the smallest and $r(t_i) = n$ for the largest income family. If two or more families have the same value of income they are given the average of the ranks. Let $\pi_i(z)$ be the family i 's share of income z_i out of the total sum of z_i, i.e., $\pi_i(z) = z_i / \sum_{j=1}^{n} z_j$. The concentration curve of z_i with respect to t_i is defined as the curve that graphs cumulative values of π_i against $r(t_i)$. The concentration ratio of z with respect to t, denoted as $C(z/t)$ is 1 minus twice the area under the concentration curve, which is equal to the ratio of the area between the diagonal line and the curve to the area of the triangle as in the definition of Gini coefficient. The concentration ratio is defined as follows.

$$C(z/t) = \frac{2}{n}\sum_{i=1}^{n} \pi_i\{r(t_i) - \bar{r}\} = 2\mathrm{cov}(\pi(z), r(t))$$

Hence,

$$C(z/t) = 2\mathrm{cov}\left(\frac{z}{n\bar{z}}, r(t)\right) = \left(\frac{2}{n\bar{z}}\right)\mathrm{cov}(z, r(t))$$

When $z = t$, the concentration curve is a Lorenz curve and the Gini coefficient is the concentration ratio of a variable with respect to itself. If y_i is the total income of the ith family, the Gini coefficient for family incomes is

$$G(y) = C(y/y) = \left(\frac{2}{n\bar{y}}\right)\mathrm{cov}(y, r(y))$$

When total income is composed of m income, a Gini coefficient is a weighted sum of m concentration ratios, where weights ϕ_k's are the shares of each income component in total income.

$G(y) = \left(\frac{2}{n\bar{y}}\right) \mathrm{cov}[\sum_{k=1}^{m} x_{ik}, r(y)] = \sum_{k=1}^{m} \phi_k C\left(\frac{x_k}{y}\right)$, where $\phi_k = \overline{x_k}/\bar{y}$

The factor concentration ratio is each component income is not equal to the component incomes' Gini coefficient as the incomes are ranked according to the sizes of total income and not its own sizes. The two are different by rank correlation ratios. To see this,

$$G(x_k) = \left(\frac{2}{n\overline{x_k}}\right) \mathrm{cov}(x_k, r(x_k))$$

$$\frac{C(x_k/y)}{G(x_k)} = \frac{\mathrm{cov}(x_k, r(y))}{\mathrm{cov}(x_k, r(\mathbf{x}_k))} = R(y, x_k)$$

The rank correlation ratio $R(y, x_k)$ is unity only if $r(y) = r(x_k)$, and $R(x_k, y) = \frac{C(x_k/y)}{G(x_k)} \leq 1$. More generally, the concentration ratio of a variable cannot exceed its Gini coefficient.

(Grouped data)

Published Gini coefficients are calculated from decile group means and not from individual incomes. Let $\hat{y_i}$ be the mean of the group to which y_i falls. Then the Gini coefficient for grouped income data is,

$$G(\hat{y}) = C(\hat{y}/\hat{y}) = (2/n\bar{y})\mathrm{cov}(\hat{y}, r(\hat{y}))$$

Note that $\mathrm{cov}(\hat{y}, r(\hat{y})) = \mathrm{cov}(y, r(\hat{y}))$ as $\mathrm{cov}(y, r(\hat{y})) = \mathrm{cov}(\hat{y}, r(\hat{y})) + \mathrm{cov}(y - \hat{y}, r(\hat{y}))$ and that $r(\hat{y})$ is a constant within the group. Hence, $\mathrm{cov}(\hat{y}, r(\hat{y})) \leq \mathrm{cov}(y, r(y))$ and the Gini for grouped incomes always underestimates the Gini for individual incomes ($G(\hat{y}) \leq G(y)$). However, but the size of this underestimation is of marginal importance.(See p.459-464, Pyatt, Chen, Fei, 1980)

Let $\tilde{x}_{ik}$ denote the average value of type k income for households in the total income group that includes household i. Then the sum over k of $\tilde{x}_{ik}$ is the average of the combined income from all sources of family incomes in a particular size group for total income, i.e.,

$$\hat{y}_i = \sum_{k=1}^{m} \tilde{x}_{ik}$$

Making proper substitution yields,

$$G(\hat{y}) = \sum_{k=1}^{m} \phi_k C\left(\frac{\tilde{x}_k}{\hat{y}}\right)$$

where $\phi_k = \overline{x_k}/\overline{y}$, the share of income component k in total average income. This formula is an exact decomposition of the Gini coefficient for incomes $\widehat{y_i}$. The concentration ratio $C(\tilde{x}_k/\hat{y})$ is sometimes referred to as 'pseudo-Gini',8 but more precisely it is 'factor concentration ratios for data grouped by total income level.'

3) Decomposition result

Table 3.1. below summarizes a decomposition result of market income Gini coefficient by income sources for the Korean urban households with two or more members and whose head is younger than 65 from 1990 to 2010 based upon Pyatt, Chen, Fei (1980)'s formula. The estimation is based upon a yearly average version of the Statistics Korea's HIES data sets for the period 1990 to 2010. Labor, business, and property income uses corrreponding entries in the data sets which are components of households' regular income. Private transfer is the sum of 'transfers across households,' 'discounts,' and 'other transfers.' Income items in the data sets contain no negative incomes thus incomes are not bottom coded .At the top, usual practices in inequality studies are to top code outliers at the value of ten times the median. At top incomed a

[8] Specifically by Fei, J.C.H., G.Ranis, and S.W.Y.Kuo, "Growth and the Family Distribution of Income by Factor Components," The Quarterly Journal of Economics, XCII (Feb. 1978), 17-53.

top-coding is applied and monthly incomes above 15 million won are all given the value. Household incomes are equivalized with a scale of square root of household sizes and Gini coefficient and concentration ratios are calculated on an individualized base.

The decomposition result shows that the market income Gini coefficient rise has been contributed mainly by the rise in labor income inequality. From 1995 to 2010, market income Gini grew by 0.045 point, of which labor income's contribution is 0.082 points. Both its growing importance in household income and increased earnings dispersion contributed to income inequality. From 1995 to 2010, the share of earnings in household income increased from 63% to 72%, while its concentration ratio rose from 0.240 to 0.324.

Unlike commonly expected, business income distribution contributed towards equalizing market income distribution instead of widening it. In 1995 business income distribution contributed to 0.088 to market income Gini. In 2010, its contribution is 0.056. That is, business income distribution contributed to lowering market income Gini by 0.031 from 1995 to 2010. It is commonly thought that the decline of self-employment and small firms which accelerated in the 2000s must have contributed to widening income distribution. The reason that the decomposition result shows otherwise is that the business income at the top income group fell during the period. In 1995, business income accounted for as much as 37% of total market income of the top income group. By 2010, its share in top group's income is just 18%. In 1995, 24% of all business income belonged to those who are in the top income group; while in 2010, 17% of all business income did. With less concentration at the top, concentration ratio of business income dropped from 0.274 in 1995 to 0.239 in 2010. As contribution to market income Gini coefficient is concentration multiplied by its income share, business income's contribution to income inequality dropped both because it became more evenly distributed and it became less important. If we ignore the top income group and calculate concentration ratio of business income among the 1st to 9th income group, there is much less change in its distribution and business income concentration ratio does not show much change since the mid-1990, before it rose in 2010. From 1995 to 2009 the concentration ratio among the 1st to 9th group stayed around 0.180 and it rose to 0.201 in 2010. Thus if it were not for the change of business income share among the top income group, business income distribution's contribution to market income inequality did not reduce significantly. Why business income dropped very quickly at the top requires further study, but a very plausible explanation is the change in business types and the incorporation trend that accelerated during the 2000s. In the 2000s unincorporated businesses (sole proprietorships) quickly declined and incorporated businesses replaced them. If profits from incorporated businesses are not counted as property incomes and contributes to asset changes instead, the incorporation trend would have reduced the share of business income at the top. Changes in business income distribution will be discussed later.

Increased contribution of earnings dispersion to income inequality is a result of both its growing importance in household income and more dispersed earnings distribution. Throughout, contribution of property income and private transfers to market income inequality is minimal. Their contribution to income Gini is less than 3% taken together and there were not much variation.

Table 3.1. Contributions to market income Gini coefficient by income sources

	Market income	**Labor income**	**Business income**	**Property income**	**Private transfer**
Contributions					
1990	0.260	0.165	0.086	0.004	0.006
1995	0.251	0.152	0.088	0.004	0.007
2000	0.270	0.196	0.066	0.004	0.004
2005	0.287	0.223	0.057	0.002	0.005
2010	0.296	0.234	0.056	0.001	0.005
income shares					
1990	1.000	0.649	0.298	0.011	0.041

1995	1.000	0.632	0.322	0.011	0.036
2000	1.000	0.634	0.303	0.014	0.050
2005	1.000	0.685	0.261	0.005	0.049
2010	1.000	0.721	0.236	0.004	0.039
concentration ratios					
1990	0.260	0.254	0.288	0.342	0.141
1995	0.251	0.240	0.274	0.370	0.192
2000	0.270	0.309	0.219	0.285	0.084
2005	0.287	0.326	0.220	0.303	0.105
2010	0.296	0.324	0.239	0.299	0.136

Source: author' calculation from yearly HIES data sets.

An international comparison of the decomposition result reported in Table 3.1 is fraught with difficulties that come from not only data but also from different socio-economic conditions across countries. Brandolini and Smeeding (2009) reports their own market income decomposition results using LIS data sets for Finland, Germany, Poland, Sweden, Taiwan, UK, and US in 2000 or nearest available years. Table 3.2 below transcribes their results and compares with the results for Korea.

Table 3.2 shows a wide discrepancy in market income Gini coefficient value across countries. The Gini values are computed based an individualized income using an equivalence scale of the square root of household sizes. Most of the countries listed have high market income Gini coefficients. Those for Finland, UK, and Poland are above the US level and near 0.5. Among the countries Taiwan has the lowest value of 0.325. But market income Gini coefficient value is very sensitive upon whether no income households are included or not, and the percentage of positive income households, listed in the fourth row, shows an obvious reason for the large discrepancy. For example, in Finland, 9.1% of individuals in the data set belong to a household with no or negative income. If only individuals with positive market income are counted market income Gini falls to 0.416. The U.K. is in a similar situation, and 10.7% of individuals are in households with no income and its Gini coefficient is the second highest next to Poland. When only the individuals with positive income are counted, the U.S. has the highest Gini coefficient value, closely followed by Germany and the U.K. The Gini value for Taiwan is very low partly because the data set for the country contains only those households with positive income. But even in comparison with other countries excluding non-positive income households its inequality is relatively low.

As Table 3.2 shows, market income Gini coefficient is sensitive to family structure. Even when two countries have the same share of positive income earners in the population and income distribution among them is the same, if a country has a smaller average family size, the countries market income Gini would be higher, because the country would have a large share of population with no income and benefits less from the equivalizing procedure as it has less economies of scale in income distribution. The European countries of Finland, Sweden, UK, and Germany typically have smaller family size than the US or Japan or Korea, and the difference in household size is one of the major reasons for the countries' higher market income Gini coefficients.9

Table 3.2. Decomposition of market income Gini by income source in various countries

Gini coefficient	**Finland 2000**	**Germany 2000**	**Poland 1999**	**Sweden 2000**	**Taiwan 2000**	**UK 1999**	**US 2000**	**Korea 2010**
market income	.469	.481	.530	.459	.325	.509	.479	.296
(> 0)	.416	.454	.373	.436	.322	.450	.455	
(> 0, %)	90.9	95.1	74.9	95.8	99.5	89.3	95.5	
wages & salaries	.501	.531	.565	.505	.464	.582	.512	.454
(> 0)	.370	.364	.360	.379	.327	.389	.429	.373
(> 0, %)	79.2	73.8	68.0	79.7	79.7	68.5	85.6	
Contribution of wages and salaries to market income Gini coefficient (%)								
	80.7	77.3	84.3	91.2	72.5	79.9	84.5	79.1
Income shares								
Wage & salaries	83.1	80.2	86.5	87.7	69.0	78.1	85.7	72.1
Self-emp income	9.2	11.6	12.9	3.0	21.1	10.6	6.3	23.6
Property income	7.8	8.2	0.7	9.3	9.9	11.2	8.0	0.4

Source: Brandolini and Smeeding (2009), Table 4.1, pp.79-80 and author's calculation from yearly HIES data sets for Korea. Korea is among urban households with 2+ members.

[9] OECD(2008), Figure 2.1, p.59 compares average household sizes across countries and their changes. Average household size in Sweden, Germany, UK, Finland is around 2.0, while it is about 2.5 and 2.7 in the US and Japan in 2005 or nearest available years. Korea's average household size is 2.84 for all types of households in 2010. Among households with 2+ members, average household size is 3.31. (www.kosis.kr)

In all countries except for Taiwan, the income share of earnings is higher than that of Korea, and contribution of earnings dispersion to income inequality is higher. In richer countries, earnings, that is wages and salaries income, accounts for about 85% of total income, while self-employment income share is about 10%. (row 9 and 10 in Table 3.2.) In comparison, the earnings income share is 72% and business income, which includes self-employment income, is about 24% of total household income in Korea as of 2010.

As wages and salaries share in income is higher in richer countries, their contribution to income inequality is also higher in richer countries. In fact, contribution to inequality is determined by two factors: one is the income share and the other is its concentration ratio which is equal to its dispersion and rank correlation with total income. In Finland, Germany, Poland, and US, contribution of wages and salaries to market income Gini is less than its income share. This is because earnings dispersion is less concentrated compared with other incomes. But in Sweden, Taiwan, UK, and Korea, their contribution is higher than income shares. This means either earnings are more unequally distributed or earnings distribution is more correlated with total income than other income sources. Gini coefficient of earnings is smaller than those of other incomes in all countries, which means that in these countries wages and salaries are more correlated with total income than other incomes. For example, although self-employment income and property income have more concentrated distribution, if they are less correlated with income ranking than earnings, then their contribution to income inequality can be less than their income share. In Sweden and Taiwan, contribution of wages and salaries to market income Gini is larger than its income share. Such higher contribution means that self-employment income distribution is less related to total income distribution. That is, self-employment income is an important income source for low to middle income groups. In Korea, the gap between its contribution and income share is significantly larger compared to Sweden or Taiwan. Self-employment income distribution is more dispersed than earnings distribution and self-employment is an important employment type for middle to low income groups.

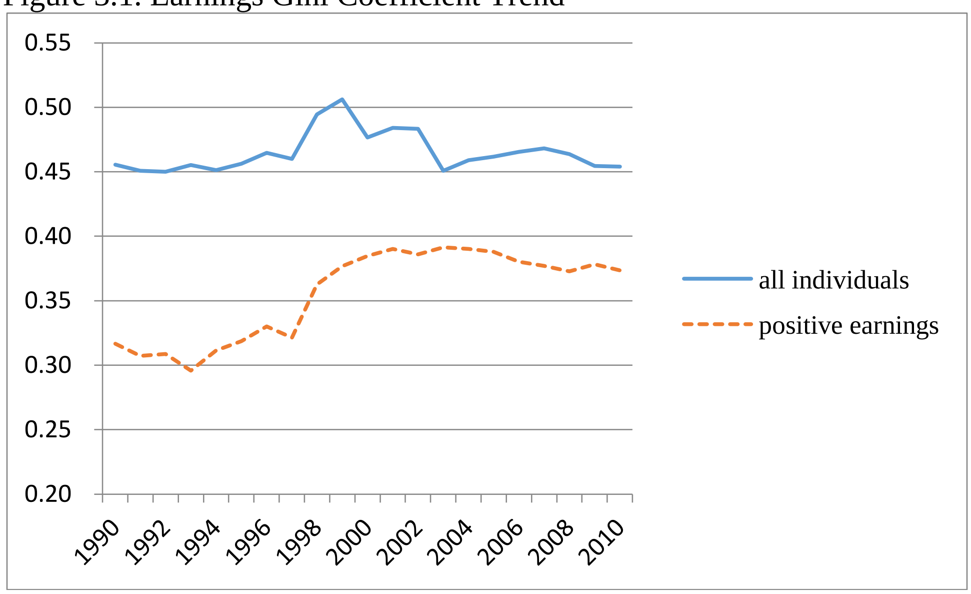
Table 3.2 is a snapshot picture of income distribution in the countries, and it does not show how income inequality has grown in the countries. To see how income inequality rose, we need to look into how each income component's contribution changed across years.

4) Earnings Dispersion

In Korea, as in other countries, the major driving force in income inequality since the mid-1990s has been increased earnings dispersion. As Table 3.1 shows, earnings contributed 61% of market income Gini in 1995; but in 2010 they accounted for 79% of income Gini. Figure 3.1 below shows Gini coefficient trend of earnings distribution. Earnings dispersion, measured by a Gini coefficient value among individuals whose household labor income is positive, grew since 1993 and jumped in the post-crisis period. It stood at 0.321 in 1997, but it reached 0.390 in 2001. Since then it stays at a roughly constant level around 0.38. The Gini coefficient of earnings among all households has been fairly stable around 0.45 before the crisis, in the aftermath of the crisis it rose up to 0.50 but then it returned to the pre-crisis level of approximately 0.45 and stabilized at the level since 2003. The Gini value for all individuals is higher than among those with positive household earnings because individuals with no earnings are included in the sample. No negative earnings are reported in the data set and about 20% have no positive earnings. Compared with that in 1995, the proportion of individuals with positive earnings in 2010 is larger and the larger proportion lowers earnings Gini. But as we see in Figure 3.1, dispersion within positive earnings increased, cancelling the lowering effect of employment growth. As a result, the earnings Gini for all individuals in urban nonelderly households stand at a similar level in 2010 as in 1995.

Concentration ratio, which measures inequality of earnings distribution, but when individuals are ranked according to their values of market income instead of earnings, has a very similar trend with the Gini among positive earnings individuals but it continued to rise in the 2000s. The share of earnings in household market income continued to increase in the 2000s as the share of business income dropped. In Table 3.1 labor income's share is 0.63 in 1995 and 2000. In the 1990s it has been generally stable at around the value. Its share rose to 0.69 in 2005 and further to 0.72 in 2010, as the share of business income continued to drop. The growth of earnings contribution to market income inequality is a results of (i) increased earning dispersion and (ii) greater importance of earnings in household income as self-employment income declined.

Figure 3.1. Earnings Gini Coefficient Trend

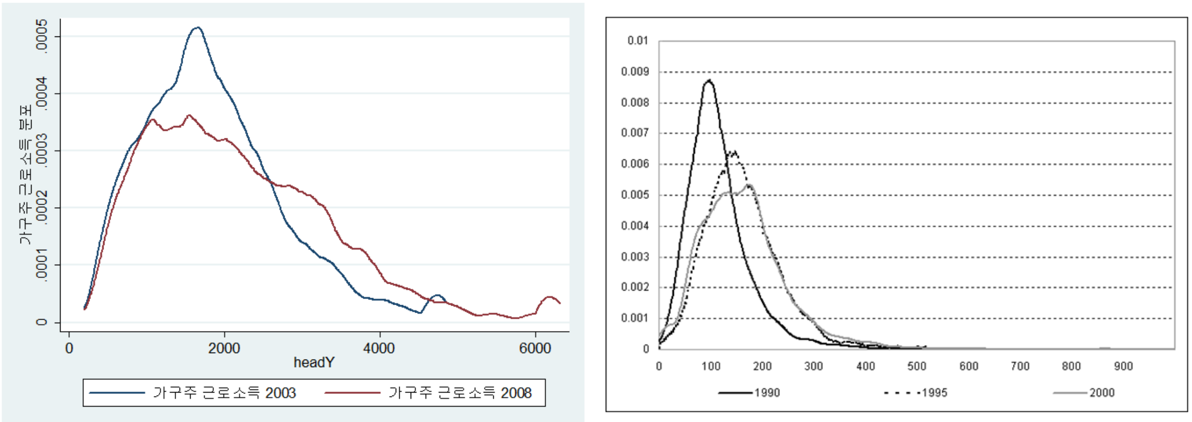


Note: among urban households with 2 or more members and whose household head's age is less than 65.
Source: author's calculation from yearly HIES data sets.

Figure 3.2. Distribution of household head's monthly earnings

Figures/pdf figures

A. 2003 and 2008 B. 1990, 1995, 2000



Source: author's calculation from HIES data sets.

How the earnings dispersion grew in the 2000s can be directly shown with a graph that compares distribution of household heads' earnings in different years. Figure 3.2 graphs the distribution (probability density function) of household head's earnings among urban households with 2+ members and whose head's age is between 25 and 64. The figure is based on a sample of household heads with positive labor income from a monthly version of the HIES data set, and the unit is average monthly earnings in the year in 2005 constant thousand won. Panel A compares the distribution of 2003 with that in 2009. The blue line, with a more concentrated shape, is 2003 and the red line, more dispersed, is 2008.

The figure shows that earnings became more dispersed in 2008 compared to 2003. As earnings distribution become more dispersed both mean and median increased among household heads, and their earnings increased. But among the low earning heads, the distribution barely shifted to the right. The general pattern is that, in 2003 household heads' earnings distribution is concentrated with a center at a little less 2 million won per month and less dispersed. By 2008, the mid to high income groups' earnings increased at a variable rate. However the low income group experienced little growth, contributing to a more dispersed distribution. Such a pattern is in a big contrast with what happen in the 1990s in Panel B. From 1990 to 1995, earnings distribution shifted to the right in a parallel fashion without a great change in dispersion. The shift went on afterwards but the intervening crisis has put the distribution 2000 back to where it stood at in 1995. Increased earnings dispersion and its greater contribution to income inequality is a result of such change in earnings distribution.

An international comparison of earnings dispersion is available from the OECD database (OECD STAT) but again the comparison is fraught with difficulties. The database is based upon samples of monthly earnings for all adult full-time workers but as the scope of omitted workers differs across countries the comparison is not complete. Korea's figures in the database seem to be produced based upon the 'Basic Survey on Wage Structure' conducted by the ministry of employment and labor that covers a sample of establishments with 5 or more regular workers. If we take a sub sample of full-time workers in the data set a comparable result can be reproduced. Apparently part-time workers are not counted in producing the statistics for the OECD database, but in case of Korea inclusion of them makes no significant difference, neither does inclusion or exclusion of workers in establishments with 5 to 9 workers – the difference is within 1%. Earnings measure does include 1/12 of bonus pay received in the previous year. If bonus pay is left out, decile ratios reduce by about 10%, but bonus pay in an important part of compensation in Korea's wage system and the database compares gross earnings they should be counted in decile ratios. Although the database allows us only a limited comparison, such a comparison is very useful in that it gives us a sense of where Korea's earnings dispersion stands at in an international standard.

According to the database, Korea's earnings inequality is among the highest in OECD countries. In terms of decile ratios of gross earnings among men, Korea's 90% to 10% earnings ratio (D9/D1) is 4.5 as of 2010. Those in France and Germany stand at around 3.0, and that of Japan stands at 3.7 in the same year. Korea's earnings decile ratio is low only when it is compared with the US (5.1) and it is even higher than that of the UK at 3.7. A D9/D1 decile ratio is a product of the top to middle ratio (D9/D5) and the middle to bottom ratio (D5/D1). Korea's earnings decile ratio is high because its middle to bottom ratio is high. In Table 3.3, Korea's top to middle ratio is about the same magnitude as those in richer economies, but its middle to bottom ratio is 2.2 as of 2010, which is close to that of the US (2.2) and higher than those in other countries.

Korea's earnings dispersion is not only high in its level but it grew quickly since 1990. In 1990, its D9/D1 ratio stood at 3.15 but it reached 3.71 in 2000, and 4.53 by 2010. In richer countries, the ratios are stable since 1990, roughly speaking. As income inequality in those countries is driven by earnings dispersion and changes in earning dispersion stabilized since the 1990s, market income inequality growth stabilized from the 1990s. The countries that experienced exceptionally sharp rise in earnings dispersion since the 1990s are the U.S. and the U.K., but even their growth is not very large compared to Korea. The D9/D1 ratio grew by 0.5 and 0.7 in the countries during the last two decade but in Korea it grew by 1.3. The growth of decile ratios has been slightly quicker in middle to bottom ratios than in top to middle ratios. From 1990 to 2010, the bottom decile ratio rose from 1.77 to 2.16 while the top decile ratio grew from 1.78 to 2.10. On the other hand, in richer economies earnings spread growth since 1990 has been mainly at the top. In the 2000s in most countries the middle to bottom earnings gap has remained stable or narrowed. Countries with large top earnings gap are the US and the UK, which have strong financial sectors.

The pattern of earnings dispersion among women is similar. Korea is the second largest earnings dispersion next to the US among the eight countries in the table and the dispersion grew rapidly since 1990. A major difference between men and women's earnings dispersion is that among women, bottom earnings gap widening has been modest since 1990. Most of the decile ratio growth has been contributed by the growth of top to middle earnings gap. In the 2000s, Korea has witnessed a large inflow of women into its labor market. If the inflow was to above median group, the bottom gap would have widened. They were highly educated but young workers and pulled the median earnings down, widening the top to middle earnings gap. This seems to be the most plausible explanation. Among men, aging of the baby boomers thickened the above median group, widening the bottom earnings gap.

Table 3.3. Decile Ratios of Gross Earnings

MEN	**Decile 5/Decile 1**				**Decile 9/Decile 5**				**Decile 9/Decile 1**			
Country	**1980**	**1990**	**2000**	**2010**	**1980**	**1990**	**2000**	**2010**	**1980**	**1990**	**2000**	**2010**
France*	1.66	1.62	1.59	1.48	2.03	2.13	2.08	2.05	3.38	3.46	3.31	3.04
Germany	..	..	1.67	1.78	..	..	1.83	1.72	..	..	3.04	3.07
Italy	..	..	1.50	1.49	..	..	1.67	1.56	..	..	2.50	2.33
Japan	1.60	1.64	1.59	1.61	1.63	1.73	1.73	1.77	2.60	2.84	2.75	2.85
Sweden	1.29	1.32	1.40	1.41	1.58	1.55	1.74	1.68	2.03	2.05	2.44	2.37
UK	1.65	1.81	1.83	1.83	1.61	1.80	1.89	2.03	2.66	3.26	3.45	3.71
US	1.97	2.13	2.14	2.20	1.82	2.07	2.24	2.33	3.57	4.40	4.79	5.13
Korea	1.95	1.77	1.97	2.16	2.09	1.78	1.88	2.10	4.08	3.15	3.71	4.53
WOMEN	Decile 5/Decile 1				Decile 9/Decile 5				Decile 9/Decile 1			
Country	1980	1990	2000	2010	1980	1990	2000	2010	1980	1990	2000	2010
France*	1.61	1.66	1.55	1.39	1.69	1.72	1.74	1.84	2.73	2.86	2.71	2.54
Germany	..	..	1.72	1.74	..	..	1.63	1.75	..	..	2.80	3.05
Italy	..	..	1.56	1.52	..	..	1.40	1.44	..	..	2.19	2.19
Japan	1.40	1.41	1.44	1.49	1.55	1.63	1.60	1.62	2.18	2.30	2.30	2.40
Sweden	1.25	1.22	1.35	1.32	1.29	1.39	1.47	1.49	1.61	1.70	1.98	1.97
UK	1.52	1.64	1.69	1.71	1.63	1.81	1.85	1.88	2.48	2.96	3.12	3.22
US	1.72	1.83	1.90	2.00	1.77	2.02	2.07	2.22	3.03	3.69	3.93	4.44
Korea	1.48	1.49	1.66	1.71	1.70	1.63	2.03	2.16	2.52	2.43	3.36	3.70

Note: * France 2010 is 2009.

The data are from the OECD earnings database. The samples for each country include all adult workers except for the following exclusions: France (agricultural and government workers); Germany (apprentices); Japan (employees with establishments with fewer than ten regular workers and employees in agricultural, forestry, fishing, public administration, public education, the army, or the police); Sweden (employees less than 20 or over 64, as well as the self-employment earnings); USA (workers less than 16 years old); Italy (agricultural and general government workers). Germany, France, Italy is monthly full time earnings, US, UK, Japan are weekly full-time earnings. Sweden is annual earnings.

Source: OECD.STAT. data extracted on 15 Oct 2012 19:57 UTC (GMT) from OECD.Stat

From Table 3.3, one can notice a large gap between earnings dispersion and household income inequality. Richer countries in Europe have much smaller decile ratios in earnings dispersion yet market income Gini coefficients are much higher. For example, market income Gini coefficients in 2000 are 0.48 in the US, Germany, and Australia, and 0.51 in the U.K, 0.46 in Sweden, 0.47 in Finland, 0.44 in Canada, and 0.38 in the Netherlands.[10] The discrepancy is caused by two factors: One is there exist a large group of part-timers not included in the data sets for earnings dispersion among full time workers. And the other is that in income data sets of the countries a significant portion of individuals are without positive household earnings. On the former, in European countries a significant part of employment is part-timers who are excluded from the full-time worker data sets. In they are included, 'on average, the Gini coefficient for personal earnings among all employees exceeds that for full-timers by 0.06 (i.e. a 20% increase), with larger rises in Finland, Sweden, Germany and the Netherlands.' (OECD, 2008, p.84) Among full-time workers the Gini coefficients for personal earnings are roughly in the range of 0.25-0.32. Among all workers, the Gini value is from 0.25 to 0.42. For instance, in Sweden the Gini's are 0.27 and 0.41, in Finland they are 0.23 and 0.41, in Germany 0.24 and 0.35.[11] Thus if all workers are accounted for, decile ratios are much larger than those shown in Table 3.3. As for the latter, Table 4.1 in Brondolini and Smeeding (2009, p.79-80) shows that if only positive

[10] Market income Gini coefficients are from Brondolini and Smeeding (2009), Figure 4.1, p 82. The numbers are based on the authors' own calculation from the LIS data sets.
[11] OECD, 2008, Figure 3.4, p.84, http://dx.doi.org/10.1787/ 421380354876

market income individuals are counted market income Gini is 0.416 instead of 0.469 in Finland, 0.436 instead of 0.459 in Sweden, 0.454 instead of 0.481 in Germany, 0.450 instead of 0.509 in UK, and 0.455 instead of 0.479 in US.

Thus, if all these aspects are taken into consideration, the difference in market income inequality between Korea and richer countries are not very large. Although market income Gini coefficient is 0.43 and 0.44 in Finland and France, among wage earners and their dependents market income Gini values are 0.36 in both countries as of 2000. In Germany market income Gini is 0.44 while among wage earners and their dependents it is 0.36. In the US, they are 0.46 and 0.42, and in the UK, they are 0.51 and 0.42. Korea's market income Gini is 0.34 for all types of households as of 2010, and 0.31 among urban families with 2+ members. According to Brondolini and Smeeding's calculation, Gini index for wages and salaries for population with positive value in 2000 is 0.429 in the US, 0.389 in UK, 0.235 in Taiwan, 0.370 in Finland, 0.364 in Germany, 0.360 in Poland, and 0.379 in Sweden. A corresponding value for Korea in 2010 is 0.373. To my view, this measure seems to be most pertinent for comparison of earnings dispersion across countries. There is not a great difference in earnings dispersion across countries, and only the US has very dispersed earnings distribution. A more proper question to address is why and how earnings dispersion has increased rapidly after the 1997 crisis.

Korea's earnings dispersion widening has the following characteristics.

i) Earnings dispersion widened while the share of wages and salaries in national disposable income (NDI) stopped growing. In Korea, the share consistently rose since the 1970s but the rising trend stopped in the mid-1990s. The level is still below its 1995 level.

ii) Earnings Gini among the population with positive earnings jumped in the years following the 1997 crisis. The Gini value remained at the level. Bottom income groups lost disproportionately during the crisis years. By 2010 bottom group barely recovered their 1995 level of real income while above median group quickly recovered after the crisis and continued sound growth of their real income.

iii) Earnings dispersion rise accompanied decline of self-employment and small firms. As business income became less important, rank correlation between earnings and market income rose and earnings became more important in determining market income.

The next section on functional distribution of income shows that the share of wages and salaries in NDI(national disposable income) did not grow since 1995. Previously, the share has risen since the 1970s. Starting from 33% in 1975 it peaked at 49% in 1996, but it stands at 45% as of 2010. Earnings distribution became more dispersed while its share out of total national disposal income did not grow. Such a phenomenon is not unique to Korea. In most OECD countries the shares of wages have declined since the mid-1980, though this share is defined as total compensation of employees and the self-employed in business sector value added.12 For example in Japan, the share dropped from 75% to 61% from 1980 to 2005; in the US it dropped from 65% to 61%; and on average across OECD 15 countries 67% to 58% in the same time period. The share of employee compensation in industries in Korea was 49% in 1980, peaked in 1996 at 62%, and declined to 59% in 2010. Empirical analysis highlights as the determinants of decline in wage share as the influence of higher capital-output rations, higher real price of oil, stronger technological progress, as well as (in a less clear-cut way) greater adjustment costs for labor and weaker bargaining power of workers.13 The earnings dispersion has widened in Korea

[12] for data see StatLink http://dx.doi.prg/10.1787/42076782661
[13] See OECD (2008), Box 1.2, p.35. The box contains a graph for the declining wage share in business sector value added.

under the context of such a global trend of shrinking wage share in industries. Compared with richer countries the size of decline relatively mild, but in Korea the wage share has continued to grow from the 1970s to the mid-1990s. As the equalizing force of growing wage share disappeared in the mid-1990s and changed its direction, earning dispersion has started to grow.

The Gini coefficient among the population with positive earnings grew in the 1990s, and jumped in the years following the 1997 crisis (Figure 3.1). If individuals with positive earnings are ranked according to their earnings (equivalized for household sizes) low income groups lost disproportion- ately during the years following the crisis (1995-2000) and they never recovered the income loss. Table 3.4 below lists changes in earnings by income decile groups. Between 1990 and 1995 earnings gains were fairly evenly across income groups. In 1995-2000 low income groups lost heavily than others, and afterward income growth distribution became more even but still the bottom group did not recover from the loss during the crisis periods. In the next crisis, the global financial crisis of 2008, low income group seem to have gained more than the high income group. The global crisis hit large export companies and weak foreign demand seem to have favored low income groups. But income distribution among population with positive earnings is subject to sampling bias. If part-timers joined labor market as a secondary earner for households more than before after crisis, a ranking according to earnings among positive earning population can overestimate earnings decline at the bottom. And if low wage workers left labor market during the adjustment following global financial crisis, the bottom tail of earnings distribution can be pushed up because of their absence. Panel B is changes in earnings of each income groups ranking according to their income. No individuals are excluded from in the sample regardless of their income or earnings level as long as they belong to urban households with 2+ members and their head is younger than 65. Panel B shows a similar picture, though the sizes of income loss immediately after the 1997 crisis look smaller and relative earnings gain among the low income group disappears. Despite, ranking by income still reveal that low income groups did not recover or appreciably improved in terms of their earnings after a decade from the crisis.

Table 3.4. Changes in earnings by decile groups

	Positive earnings population, earnings ranking					**All population, income ranking**				
Deciles	**1990-95**	**1995-00**	**2000-05**	**2005-10**	**95-10**	**1990-95**	**1995-00**	**2000-05**	**2005-10**	**95-10**
1	**0.25**	**-0.51**	**0.21**	**0.30**	**-0.24**	**0.45**	**-0.20**	**0.09**	**0.04**	**-0.09**
2	0.38	-0.41	0.27	0.27	-0.04	0.58	-0.20	0.13	0.17	0.05
3	0.48	-0.29	0.19	0.27	0.07	0.49	-0.12	0.23	0.12	0.21
4	0.50	-0.20	0.20	0.23	0.18	0.55	-0.17	0.22	0.22	0.23
5	0.52	-0.14	0.23	0.16	0.23	0.55	-0.14	0.32	0.14	0.30
6	0.53	-0.09	0.24	0.13	0.26	0.46	-0.04	0.33	0.07	0.37
7	0.53	-0.05	0.23	0.11	0.30	0.54	-0.04	0.27	0.14	0.39
8	0.52	-0.03	0.24	0.11	0.34	0.55	0.00	0.32	0.09	0.43
9	0.50	0.00	0.24	0.12	0.39	0.49	0.02	0.27	0.19	0.54
10	0.45	0.05	0.24	0.14	0.48	0.38	0.24	0.31	0.12	0.82

Note: Among individuals in urban households with 2+ members, whose heads are younger than 65.
Source: author’s calculation from yearly HIES data sets.

Personal earnings are a multiplication of wages by working hours, and its dispersion can be decomposed into the part contributed by wage dispersion, hour variation, and a covariance between the two. Among the two, wage variation is usually the most important factor in earnings variation. Blau and Kahn (2009) attributes wage variation 73% of male and 72% of female earnings variation on average in their study of eight OECD countries in mid 1990s.

The change in wage structure is towards highly educated and more experienced also in Korea. Among men aged between 35-39, college wage premium over high school graduates was 0.5 in 1995 but rose to 1.0 in 2008. On average in age 25-54 college premium rose from 0.6 to 1.0. Age premium of age 50-54 against 30-34 rose from 0.2 to 0.4 among high school graduates from 1995 to 2008, but among the college graduates it dropped from 0.9 to 0.7 because the ratio of young college graduates to elder dropped. The degree of skill biased wage structural shift is less compared with the US, as Korea's wage system is relatively rigid and supply of young college graduates increased, but the direction of change is the same. Those who lost most are the young unskilled high school graduates and high school dropouts.

Table 3.5 Hourly real wages for men

(unit: thousand 2005 won per hour)

Age	25-29	30-34	35-39	40-44	45-49	50-54	25-54
1995							
HS dropouts	5.43	6.07	6.29	6.32	6.21	5.84	6.03
HS	5.50	6.50	7.23	7.84	8.00	7.59	7.11
Jr college	5.70	7.12	8.55	9.87	9.70	9.82	8.46
College +	6.43	8.33	10.50	12.47	14.12	15.62	11.25
2008							
HS dropouts	5.28	6.01	6.75	7.78	7.98	8.37	7.03
HS	6.20	7.74	8.92	9.54	10.03	10.52	8.83
Jr college	7.66	9.82	11.76	12.77	13.85	15.17	11.83
College +	10.69	13.84	17.60	19.96	21.51	23.80	17.90

Note: wages are simple averages of mean wages by age.
Source: author's calculation from MoEL, Basic Survey on Wage Structure

The wage structure shift has favored the skilled and contributed to widening earnings dispersion. But in Korea there is another dimension of change that affected earnings dispersion. Self-employment and small firms declined in the 2000s and as low earnings groups are more likely to work in small firms or self-employed, the business environment change was unfavorable to them. If incorporated businesses have replaced small firms such change would have worked towards earnings dispersion.

This issue is related to business income discussed in the following subsection, the general trend is as follows. The Census on Establishments, conducted by the Statistics Korea, classifies establishment into four business types according to the legal form of ownership. They are unincorporated (sole proprietorships), incorporated business, non-profit organizations, and associations. Most of small firms, owned and operated by individuals are unincorporated, and many education or medical institutes belong to non-profit organizations in Korea.

Table 3.5 shows that employment of unincorporated establishments grew rapidly in the 1990s but slowed down in the 2000s. From 1993 to 2000, about a half of jobs were created by unincorporated businesses, but from 2000 to 2010, their share is about 6% and 70% of jobs were added in incorporated business establishments. As the sizes of unincorporated business are mostly small, a parallel change is the slowdown in employment growth among small establishments (Table 3.6). In the 1990s most of employment growth in the 1990s was in small firms with less than five workers. But their share in job addition was just 10% in the 2000s and job creation became more dispersed across all sizes of establishments.

Table 3.5. Workers by types of business (‘000)

Year	Total	Unincorporated	Incorporated	Non-profit	Associations
1993	12,245	5,986	4,583	1,427	250
2000	13,604	6,645	4,818	1,823	318
2010	17,647	6,900	7,670	2,650	427
1993-2000	1,359	659	235	396	68
2000-2010	4,043	255	2,852	827	109

Source: KNSO, Census of Establishments, various years.

Table 3.6. Workers by sizes of establishments (‘000)

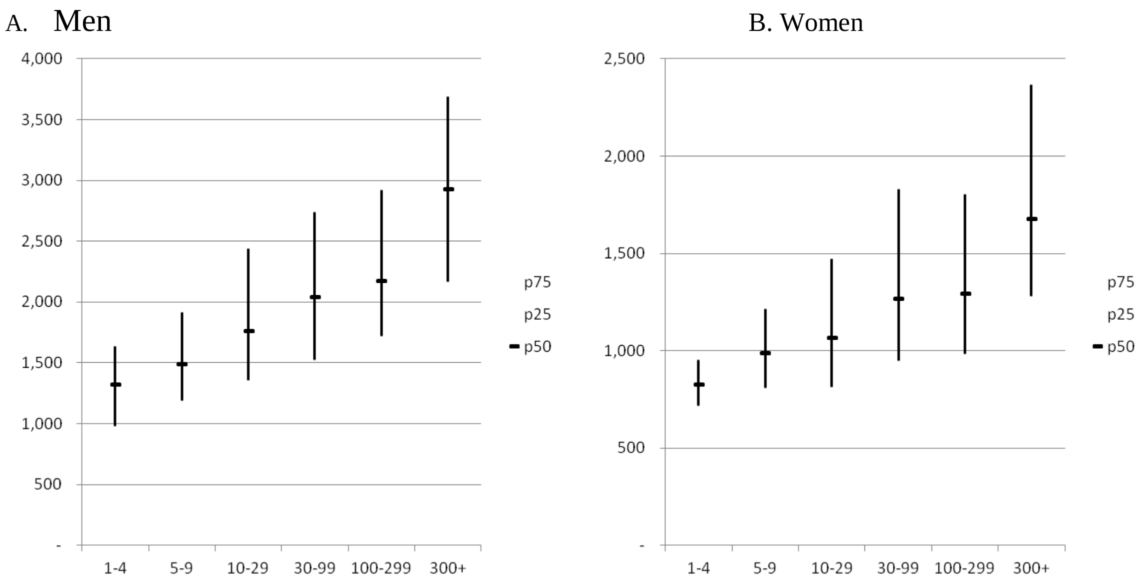
	total	**1-4**	**5–9**	**10–19**	**20-99**	**100-299**	**300-999**	**1000+**
1993	12,245	3,538	1,240	1,072	2,603	1,225	1,048	1,519
2000	13,604	4,651	1,552	1,429	3,020	1,315	930	706
2010	17,647	5,075	1,841	1,894	4,321	1,961	1,345	1,211
1993-2000	1,359	1,113	312	357	417	90	-118	-813
2000-2010	4,043	424	289	465	1,301	646	414	504

Source: KNSO, Census of Establishments, various years.

Slowdown of the growth of unincorporated businesses and small firms are consequences of traditions services industry growth slowdown typically in sales and hotel/restaurants. Decline of the industries implies weakened demands for unskilled labor. Small firm have a high share of low pay workers and non-regular workers. Figure 3.3 shows that among men, the 75% percentile wage in 1 to 4 worker establishments, that is a one-quartile highest pay worker, corresponds to a 25% percentile wage in 100 to 299 worker establishments and is lower than 25% percentile wage in large establishment with 300 or more workers in 2007. Small firms hire disproportionate share of low pay and unskilled workers. Consequently decline of small firms and unincorporated business implies weaker demand for them.

Implication of the decline of unincorporated business and small firms in income inequality is provided by the fact that despite the slowdown of growth in unincorporated business and weakened demand for unskilled labor, the share of earnings in low income groups did not fall in 2010 compared with those in 1995. Among below the median income groups, the proportions of labor and business income in total market income did not appreciably change in 2010 compared with those in1995. Growth of unincorporated businesses significantly slowed down in the 2000s but the low income group still depend heavily on business income and income shares earnings did not rise nor declined in 2010 compared with fifteen years ago. In comparison among the above median group income shares of earnings grew as the share of earnings grew in household income (Table 3.1). Transition to new earnings opportunity has not been easy for the less skilled group workers in the post-crisis era.

Figure 3.3. Distribution of monthly earnings by establishment sizes



Source: author’s calculation from EAPS, supplementary survey, August 2007.

Table 3.6. Shares of earnings and business income in market income by income decile groups (%)

	Earnings					business income				
Deciles	1990	1995	2000	2005	2010	1990	1995	2000	2005	2010
1	58	55	52	58	64	29	34	29	24	19
2	66	67	58	60	66	28	27	32	29	26
3	65	62	58	62	65	30	34	36	31	30
4	69	69	59	61	70	26	28	34	33	26
5	66	65	58	64	69	28	32	36	31	27
6	67	63	62	69	69	29	33	33	27	26
7	66	65	64	67	71	30	31	30	28	24
8	66	65	65	72	72	30	30	30	24	25
9	67	64	65	69	75	28	30	29	26	22
10	61	58	70	76	77	34	37	25	20	18

Source: author’s calculation from yearly HIES data sets.

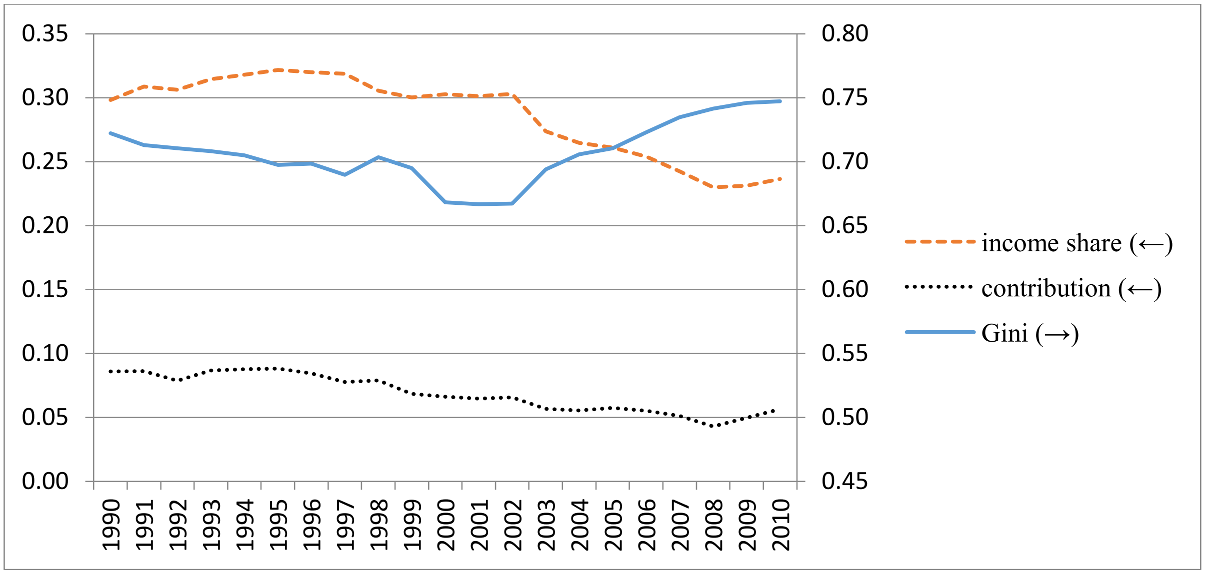
5) Business income

Business income in the HIES data set is defined as incomes that are transferred from the business to the households and excludes retained profits. Rents from real estate or equipment lease are included in this income category.

Figure 3.4 graphs the share of business income in household income, its contribution to market income Gini coefficient, and the trend of the business income Gini coefficient when individuals are ranked according to sizes of business income. The Gini coefficient in real blue line is for all individuals in urban household with 2+ family members and with a head younger than 65. Households' income from business, which includes self-employment income, declined in its share of income since the mid-1990, with an accelerated pace since 2003. Increase of Gini values of business income distribution reflects concentration of business income as small firms disappears.

If we plot the distribution (probability density function) of household heads' business income, among those with positive business incomes, there has been literally no growth in business income distribution from 2003 to 2008 (Figure 3.2 Panel A). In the 1990s business income distribution continued to shift to the right, which means an even improvement of income, paralleled by earnings distribution shift in the period. Even in the years following the crisis business income distribution continued to improve, when earnings distribution stopped to improve (Figure 3.2 Panel B).

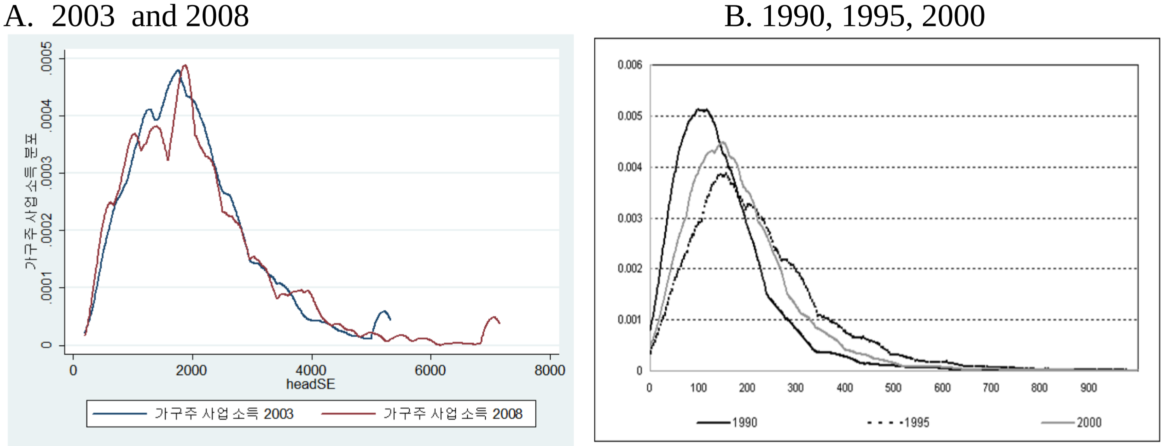
Figure 3.4. Business income Gini, income share and contribution to income inequality



Source: author’s calculation from yearly HIES data sets.

Figure 3.5. Distribution of household head’s monthly business income

A. 2003 and 2008 B. 1990, 1995, 2000



Source: author’s calculation from HIES data sets.

Despite the decline of business as a source of income for households and its stagnant growth in the 2000s, among the below median income groups the share of business income in household income is remarkably persistent. Panel B in Table 3.6 shows that the proportion of business income in household income has not appreciably dropped among the 2nd to 4th income decile groups in 2010 compared with the shares in 1995. Only in the above median groups, it did drop and the groups came to have more of labor income households. During the crisis years, shares of business income households actually increased as economic restructuring that ensued the crisis involve a mass layoff of workers. Table 3.7 is the shares of business income earners among household heads. In this table, a business income earner is defined as the household head whose business income is greater than his/her labor income. The figure shows that despite the economic crisis and decline of self-employment and small firms in the 2000s, the share of business income households are remarkably persistent. Among the household heads in income groups 2 to 6, the share of business income earners dropped just a little or even rose a little. In higher income groups, business income earners significantly declined as unincorporated businesses are replaced by incorporated businesses. In 1995, the top income group had the highest share of business income earners. But by 2010 it has the least of business income earners.

Table 3.7. Shares of business income earners among family heads by income groups (%)

Year	1	2	3	4	5	6	7	8	9	10	average
1995	32	29	27	28	28	30	31	29	33	35	30.1
2000	37	27	31	32	31	29	40	35	27	22	31.1
2008	27	28	29	35	29	30	23	25	17	14	25.7

Note: no income heads are excluded.
Source: authors' calculation from KNSO, HIES data sets.

In the next section it is shown that the share of household income as a share of national disposable income continued to decline and the fall has accelerated after the 1997 crisis. And the major reason for it is the decrease of profits that accrues to households. And we have seen that unincorporated businesses have lost ground to business incorporations. A natural and legitimate question would be what has caused the decline of unincorporated business and growth of business incorporations in the 2000s with its negative effects upon income distribution. Services industries did not shrink although manufacturing sector production share has been high as Korea strengthened it export sector and accumulated foreign reserves to protect it foreign currency position. And consumption did not decline as a share of NDI. The pattern of services industry structural shift is such that small firms and self-employment lost ground and a little larger firms replaced them. Self-employed are consisted of better educated than before and are in their middle ages. Workers prefer self-employment than wage earners and the common constraints that prevent them from opening up a business is lack of capital and knowledge, which in this case is the business experience to run his or her own business. In the 2000s, bank loans to households have increased as they are released from massive credit demands from the industries. And business knowledge has been accumulated from workers employment experience in various types of companies. It seems that availability of capital and knowledge for business has been the major factor for the incorporated business growth in the 2000s, which might be called as an 'incorporation trend.' As such the incorporation trend would hardly be turned around and ways for a more equal income distribution would have to be sought in expanding opportunities of wage earnings.

6) Property income

The HIES data property income includes interests received, dividends, and other incomes from properties. But its share in the data is tiny, less than 1% of total household income, whereas they are 8 to 10% in richer countries. Such a discrepancy seems to imply gaps in the range of incomes that are counted as property income. Some property incomes are hardly distinguished from asset gains and it seems that a significant portion is classified as asset gains, whereas in other countries they are counted as property income. Its contribution to income Gini is less than

0.5% and the income source does not have any meaningful impact on income inequality according to the current definition of the HIES data.

4. Functional Distribution of Income

1) Functional distribution and personal distribution

The discussion in the previous sections suggests that Korea's income inequality growth may be caused or at least accelerated by macroeconomic events. When the inequality trend changed direction in the second half of the 1990s, major macro also reversed its direction. Functional distribution means income distribution by factors. Functional distribution of national income between wages, profits, and rents is important for macroeconomic functioning of an economy and reflects macroeconomic situation. The link between functional distribution and income inequality, which is concerned with inequality between individuals within the household sector, is not very firm, and may well depend upon how functional distribution has changed. But it is highly probably that functional and personal distribution is linked. The forces that determine functional distribution are very likely to influence income inequality. A functional distribution shift affects earnings distribution through the labor market mechanism, and a distribution shift across institutional sectors affects the structure of household income.

Production factors have very different distribution. Property distribution is much more concentrated than labor, and changing shares of property and labor income alters income distribution by itself. IMF(2007) and OECD(2007) both have devoted considerable attention to the decline in labor's share in national income in advanced economies as reflecting the impact on workers of globalization. If labor income share is affected by globalization, its change could be taken as a measure of the impact of globalization on the economy. And the implication of globalization on income inequality is well understood. Daudey and Garcia-Penalosa (2007) found that a higher labor share (in manufacturing) is associated with a significantly lower Gini coefficient for income inequality and in particular a lower share for the incomes of the top fifth of the population in a study covering 39 countries, both OECD and developing countries. Checci and Garcia-Penalosa (2005) found that 'the labor share is a fundamental aspect of overall inequality patterns, with an impact as important as that of relative wages.'

An opposing view claims that there is no necessary connection between the share of value added paid as wages and the share of household disposable income going to low-income groups.14 If business income is taken into account low income groups are not necessarily those with high earnings share in their income. If low a income group receives just wages and a high income group receives wage and capital income and capital-labor substitution elasticity is 1, an increase in the number of low income will lead to an increase in their income share.15 A mathematical necessity does not exist between a declining labor share and inequality, but if we consider the causes of labor share decline, it is more likely to be associated with higher inequality. If trade allows a country to specialize in areas of comparative advantage according to the Hecksher-Ohlin model, capital-rich countries will specialize in the production of capital intensive goods. Returns to labor, the relatively scarce factor, would gradually decline, and labor's share would fall as specialization progresses. In this case the force behind a declining labor share would raise inequality at the same time (Guscina, 2006). Accumulation of ICT capital and labor-saving technology which have a negative impact on labor's share, favors the skilled tilting income distribution towards them. Thus, there may not exist an exact causality relationship but if we consider the underlying forces, the two phenomena are likely to be linked.

[14] OECD (2008), p.35.
[15] Lam(1997)

Korea's inequality growth is in common with those in richer OECD countries, but its timing is different, and it accompanied a decline of self-employment and small firms in the 2000s unlike in those economies. Such a difference in patterns suggests that Korea's income inequality is driven not only by common factors but also by Korea specific factors. And the specific factors are likely to be related to Korea's macro economic situation after its foreign currency crisis in 1997. For this reason this section reviews the large shifts in functional distribution and in shares by institutional sectors.

2) Labor Income Share Trend

Labor income share means the proportion of income that accrues to labor inputs in production. In fact, labor income share can be diversely defined. The simplest measure of labor's share in income is the proportion of wages and salaries to GDP, Gross Domestic Product. The bottom line in Figure 4.1 shows its trend. The share of wages and salaries in GDP rose steadily since 1975 and peaked in 1996 at 47%, but it fell steeply after the 1997 crisis until 1999. It bounced mildly afterwards but failed to recover the previous peak level and stays around 45% recently.

In measuring income, national disposable income (NDI) is more appropriate than GDP because it subtracts capital depreciation. Capital depreciation is the part of production cost that does not accrue to either labor or capital, hence constitutes the gap between production and income. If capital depreciation not subtracted, income share of capital is overvalued. Being an income measure, NDI is equal to the sum of total consumption and saving. Technically, NDI is GNDI (gross national disposable income) net of capital depreciation. GNDI is obtained from GDP after some adjustments for foreign factor incomes and transfers.

The real line, second from the bottom depicts the trend of wages and salaries as a proportion to NDI. If we ignore the small adjustments, the difference between GDP and NDI is capital depreciation and widened gap between the two lines represent growing share of capital depreciation in GDP. The proportion of capital appreciation to GDP is 11% in 1990 and 13% in 2010. A higher proportion implies that the Korean economy employs more capital and incurs higher capital cost in production. The current level is not a particularly high or low, and similar with those in other countries. When capital depreciation is excluded, labor's share in 2009 at 47% is still below its peak level of 49% in 1996 but higher than the levels in the early 1990s.

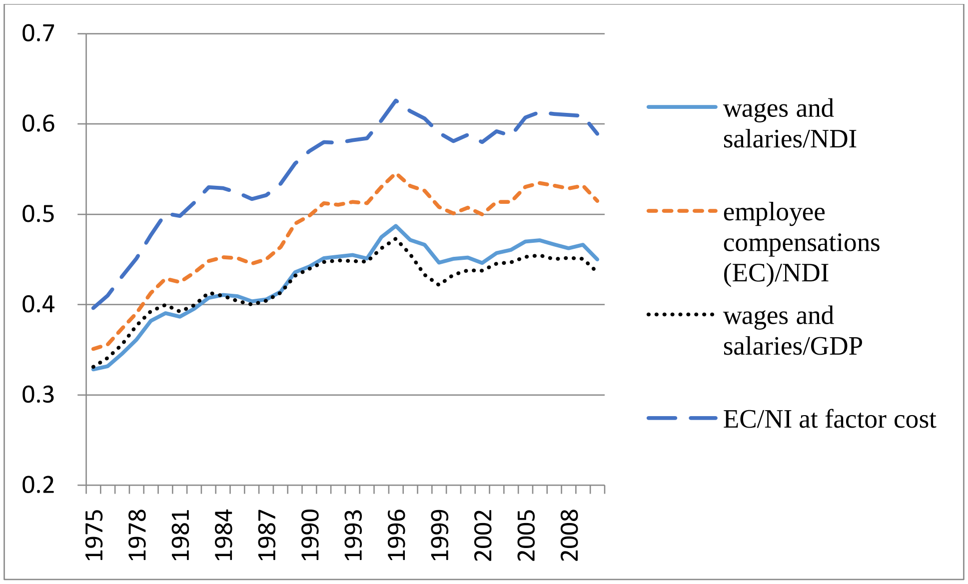
Social security and pension contributions are labor costs incurred to employers but they actually accrue to employees, and constitute a part of labor income. Employee compensation (EC) adds employers' social security and pension contributions to wages and salaries. The line above is ratios of employee compensation to NDI. As social contributions increased appreciably after the 1997 crisis, when they are added up, labor income share in 2009 is at 53% which is close to its peak level of 55% in 1996.

The top line is employee compensation (EC) over national income (NI) or equivalently national income at factor cost. National income (NI) subtracts net indirect taxes and net foreign transfers from national disposable income (NDI) because they do not accrue to either labor or business. Thus, national income (NI) is the sum of employee compensation and business profits (including their foreign sector parts). And labor's income share in NI is its income share in the business sector. The published 'labor income share' by the Statistics Korea corresponds to this measures of labor income share.16 The share stands at 58.9% as of 2010. 'Labor income share' in Korea steadily grew from the 1970s, with a pronounced growth in the second half of the 1980s,

[16] The official English translation of labor income share is 'Employment costs to gross value added.' But 'gross value added' does not mean gross of capital depreciation.

and reached a peak at 62.6% in 1996.[17] It fell as much as 4.6% points after the crisis but regained most of its loss afterwards. However, labor income share growth is stagnant in any measure of labor income share and its peak level of 1996 has not been recovered yet.

Figure 4.1. Labor's Share in Total Income: 1975-2010



Source: The Statistics Korea, KOSIS database.

Korea's labor income share at 60% is lower than those in richer OECD countries, where the shares stand at around 70% or even higher. One important reason for Korea's low labor income share is its large self-employment sector. Income from self-employment is counted as business income and not counted as labor income, lowering labor income share. Roughly, Korea's self-employment share in total employment is about 10% points higher than those in richer countries. If we assume that the self-employed earn as much as wage earners, total wages and salaries would be 10% higher if they were employees. This would make labor income share 66% instead

[17] If an inexorable 'onward march' of labor share in the U.S. were in the 1960 and 1970s, in Korea it would have been from the mid-1970s to mid 1990s and ended with the 1997 crisis.

of 60%. Still the hypothetical labor share is lower than those in richer countries and the difference can be explained by lower degree of capital accumulation. If the elasticity of substitution between capital and labor is not one but less than one as empirical research finds, labor income share would increase if capital-labor ratio (K/L) increase by capital accumulation.18 As Korea's capital-labor ratio is lower, the remaining could be attributed to lower degree of capital accumulation.

The trend of labor's share has reversed in most advanced countries, and the reversal is more pronounced in Europe and Japan than in the US. The trends are documented by many authors, including Piketty and Saez (2007). In the US, labor's share reversed around 1980 and mildly declined. But if top 1% of employees are left out, the decline is as steep as its rising trend during the 1960s and 1970s. The average labor share of 15 OECD countries including Japan peaks in 1976 and the downward trend continues until 2006 where data are available (see figure in OECD(2008), p.35). Korea is rather exceptional in that it did not experience a declining labor share. Instead it experienced a declining share of household business profits out of NDI (Figure 4.5), if a part of the profits were counted as labor income, Korea would have also experienced a declining labor income share.

3) Industrial Structure Shift

One of the factors behind declining labor's share may be shifts in composition of economic activities or industries. For example, manufacturing has a higher labor income share than finances, and a shift from manufacturing towards finances would reduce labor's share. In Korea as well, it has been often pointed out that manufacturing employment reduction may have caused labor income share to decline and consequently inequality rise. Korea's manufacturing

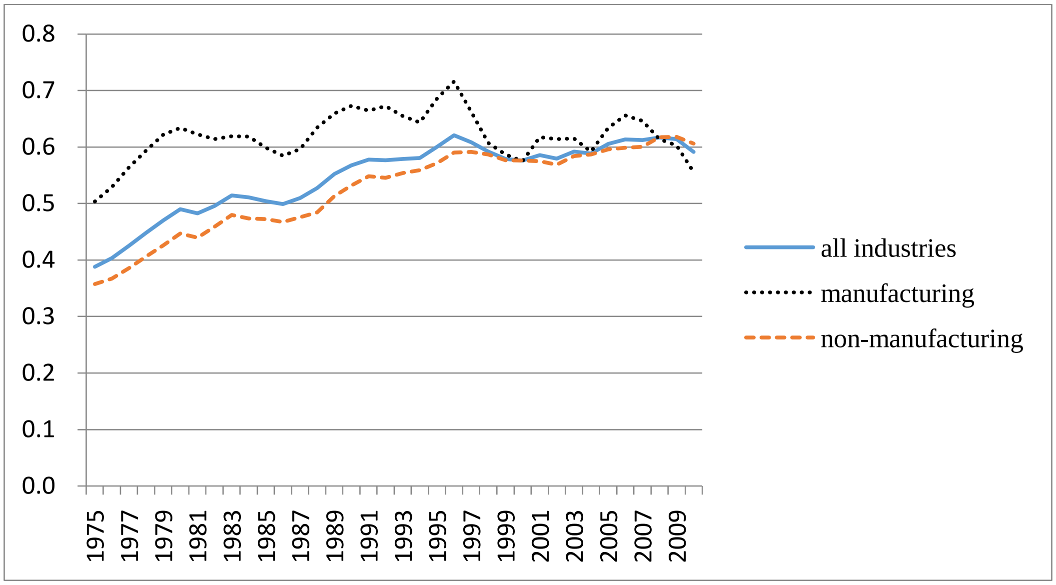
[18] For example, Rowthorn (1999) finds capital-labor substitution elasticity is less than one. European Commission(2008), Chapter 5 finds capital and low skilled labor are substitutes while capital and medium- or high-skilled labor are on average complements. When the latter effect predominates, labor share increases when capital labor ratio goes up.

employment has decreased since the early 1990s as the industries move towards more capital and technology intensive industries and as more production is outsourced. Figure 4.2 is the trend of labor income shares, defined as the ratio employee compensation to industry national income at factor prices, for all industries (inclusive of agriculture), manufacturing, and all industries except manufacturing. Manufacturing has higher labor income share than others and growth of the industry has contributed to raise overall labor income share. Manufacturing's labor income share rise was pronounced from the mid-1980s to the mid-1990s and reached a peak in 1996 at 72%. After a sharp fall following the crisis, its current level is not different from those in other industries.

But industrial structure shift itself had little sustained effect on labor's share. Figure 4.2 shows that even without manufacturing sector, labor income share growth would have become stagnant after 1997. Labor income share drop in manufacturing did contribute to overall fall of labor's share but it is not a major factor but a part of the factors, as will be confirmed by a simple mathematics below. Globalization and consequent manufacturing employment decrease, and fall of labor' share in manufacturing have been often cited as the major cause for widened inequality. But after the 1997 crisis, the gap in labor's share between industries largely disappeared as shown by the narrowing of distance between dotted and real line in Figure 4.2.

As the share of manufacturing in total national income at factor price is 30%, a drop of 10% point of labor income share would have resulted in a drop of 3% point in the trend of overall labor income share. In Figure 4, contribution of high manufacturing labor income share is revealed by the gap in labor shares between all industries and non-manufacturing. After the 1997 crisis, the gap between the two lines disappears. Non-manufacturing labor income share has led overall labor income share growth previously but since the mid 1990s its growth became stagnant. Manufacturing employment decrease is only part of the whole story of stagnant labor income growth.

Figure 4.2. Labor Income Share in All Industries and Manufacturing: 1975-2010



Source: The Statistics Korea, KOSIS database.

Effects of industrial structure shift on labor income share can be analyzed using the following simple equation. Labor income share S_L is the sum of labor income W_i (employee compensation) across all industries divided by sum of all industry national incomes, Y_i. Hence it is equal to the sum of labor income share by industries weighted by the industry's share in national income. Mathematically,

$$S_L = \frac{\sum_i W_i}{\sum_i Y_i} = \frac{\sum_i (W_i/Y_i)\, Y_i}{\sum_j Y_j} = \sum_i \left(\frac{W_i}{Y_i}\right) y_i \text{ , where } y_i = \frac{Y_i}{\sum_j Y_j}$$

To see the effect of industrial structure shift on labor income, Figure 4.3 compares labor income share trend with those with industry weights given by (i) 1995 industry weights, and (ii) 2010 industry weight. The figure shows that labor income share evaluated at 2010 industrial structure is higher than that weighted by 1995 structure. The industrial structure shift from 1995 to 2010 had an effect towards raising labor income share, and not towards lowering labor's share.[19] The 2010 industrial structure has, compared with that in 1995, larger weights in manufacturing, health and social service, education, and business services, and smaller weights in construction, agriculture, and sales and hotel/restaurants industries. Among the shifts, the growth of social service industries such as health and social services, education, and business services contributed to labor income share rise. Manufacturing's share in national income has grown from 25% to 30%, but as the labor income share in manufacturing is not any higher than those in other industries in 2010, its growth little changes aggregate labor income share. If it were not for a transition towards service industries, labor income share would have dropped even more.

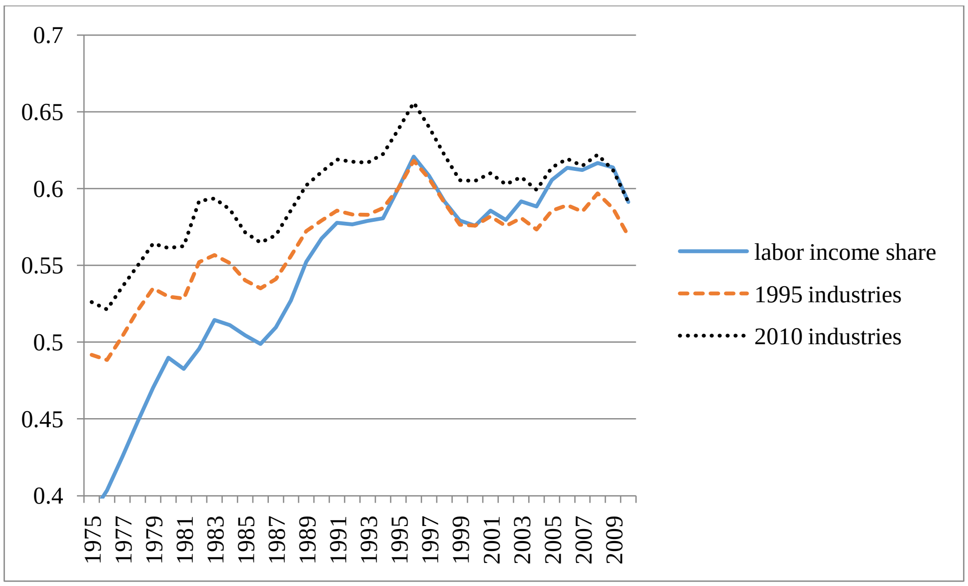
In richer countries, at issue are the effects of de-industrialization, a lower share of manufacturing in value added, and growth of financial industries. But in Korea, manufacturing share did not decrease and finances and insurances industry grew just by 1% point from 3% to 4% in its share of national income from 1995 to 2010. Hence industrial shift has just a little effect in labor's share. As total labor share is the sum of industry labor share weighted by the industry's weights in value added, the change is the sum of changes by industries.

$S_{Lt} - S_{Lt'} = \sum_i \{\omega_{it} y_{it} - \omega_{it'} y_{it'}\}$, where $\omega_{it} = \frac{W_{it}}{Y_{it}}$, $y_i = \frac{Y_i}{\sum_j Y_j}$

[19] Likewise, in major European economies, the compositional changes in industries had only a minor long-term effect of wage share, and a prolonged decline of labor income share is mostly due to changes within individual industries. (De Serres et al., 2002)

From 1995 to 2010, total labor share change is -0.009, from 0.600 to 0.591. Manufacturing's contribution to total labor income share dropped by -0.007 from 0.173 to 0.165. On the other hand, the combined effect of education and health/social services industries in labor income share growth is 0.030. A large negative effect on labor's share is done by construction, which is -0.024 in the period. Internal factors contributed more to the decline of labor's share.

Figure 4.3. Industrial Structure Shift and Labor Income Shares



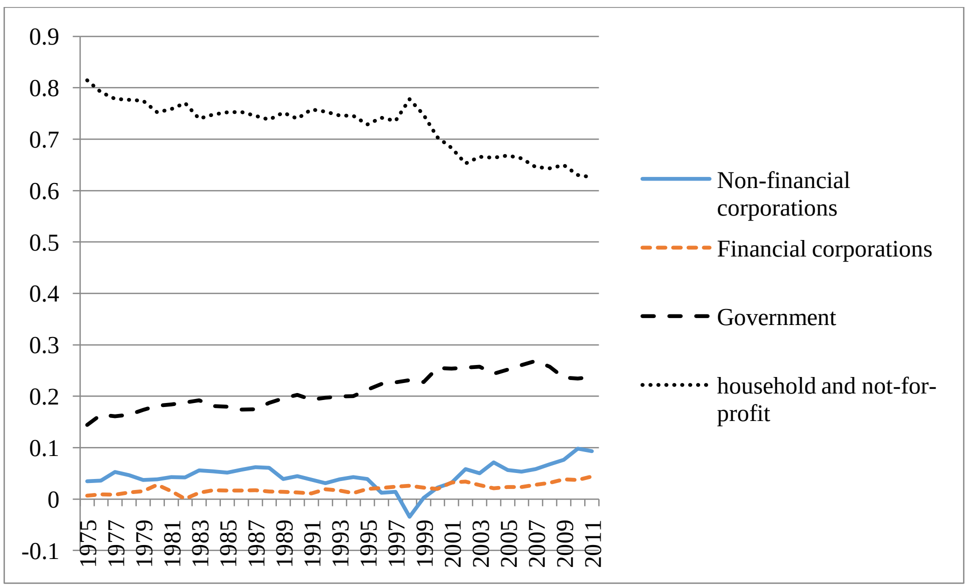
Source: The Statistics Korea, KOSIS database.

4) Income shares by Institutional Sectors

To see how labor income share growth has become stagnant, we need to look into the trend of labor income share by institutional sectors. The Statistics Korea publishes sources and uses of income by institutional sectors of households and not-for-profit organizations, non-financial corporations, financial corporations, government, and foreign sector. Unincorporated sectors are merged into household sector.[20] However, employment compensation in each sector is not published, just household income by sources is available.

Figure 4.4 is the trend of shares of national disposable income (NDI) by institutional sectors from 1975 to 2010. A prominent change after 1997 is growth of shares of financial and non-financial corporations in national income and corresponding drop in households' share. The households' share of income consistently fell from 1997, and the trend accelerated in the 2000s. Labor's share is stagnant during the 2000s but an accelerated fall of the share of unincorporated business dragged down the share of households' income in NDI.

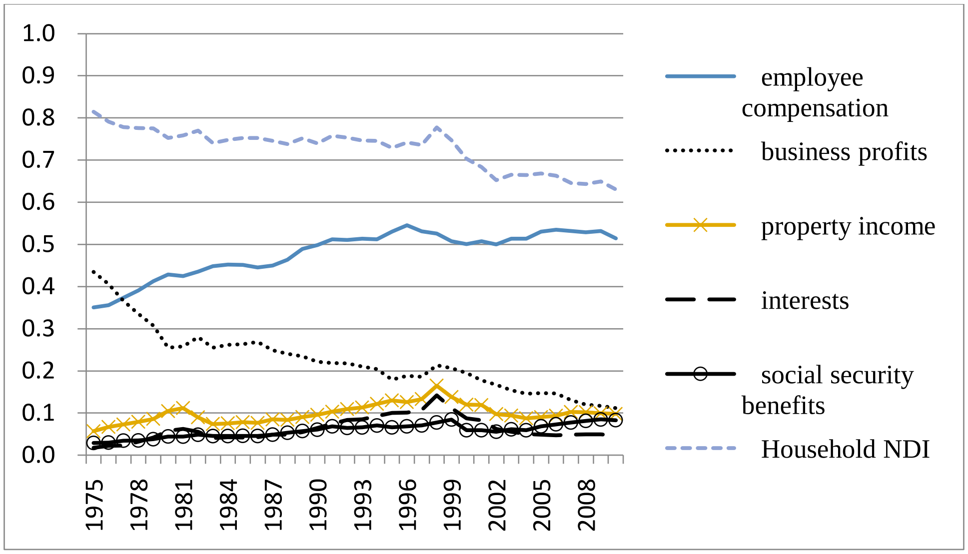
Figure 4.4. Trend of National Disposable Income Shares by Institutional Sectors



Note: NDI(national disposable income) includes indirect taxes.
Source: The Statistics Korea, KOSIS database.

[20] For classifications of institutional sectors, see Park, Hyung Soo (2002), p.44 and UN, SNA 2008.

Figure 4.5. Household Income by Sources as a Proportion to NDI



Source: The Statistics Korea, KOSIS database.

The separate trend of employee compensation and unincorporated business income can be confirmed from a graph of household income by sources represented as a proportion to NDI, given in Figure 4.5. As employee compensation belongs to households, the ratio of it to NDI is the labor income share given in Figure 4.1. Its trend is largely stagnant since 1996, but business profits, that is, profits from unincorporated business continued to fall and dragged down household's income share. The falling trend of business profits reflects the decline of self-employment and small firms. From the 1970s to the 1990s, the share of employee compensation steadily grew as a proportion to NDI, while the share of profits from unincorporated business steadily fell. The sum of these two incomes made household's share in NDI stable around 75% until the 1990s. But in the post-crisis era, the rise of the share of employee compensation became stagnant, and the fall of unincorporated business profits accelerated, resulting in a fall in household's income share and making it to stay around 65% in the 2000s.

As the household income share lowered in the 2000s, the income shares of non-financial corporations and financial corporations gained. Their income shares were both 2% in 2000, but their shares became 10% and 4%, respectively in 2010 (Figure 4.4), while households share dropped from 70% to 63%. Government's share is 25% and 23% in the years.

Income shifts resulted in a large change in wealth distribution across institutional sectors. Table 4.1 is from the capital accounts table of national income by institutional sectors. The unit is trillion nominal won and subject to inflation, but the statistics show a very strong and persistent increase in magnitude of domestic and foreign saving. (Foreign sector net worth is negative of net savings abroad.) Since 1997, corporate sector net worth has enormously increased, savings abroad has greatly increased; while household net worth growth is stagnant, it actually fell. The steep growth of domestic savings in the post-crisis era is fueled by corporate and government sector savings. Before the crisis, half of domestic savings was household savings, but currently it is 14%. The foreign exchange crisis in 1997 left an enormous impact on the Korean economy.

Table 4.1. Changes in net worth due to savings and capital transfers by institutional sectors

(unit: 2010 trillion KRW)

	1990	1995	2000	2005	2010
Non-financial corporations	7.5	14.5	13.0	44.2	102.7
Financial corporations	2.5	7.3	10.1	14.1	36.5
Government	11.9	29.0	56.2	63.4	54.4
household and not-for-profit	30.0	49.2	35.2	38.5	31.2
domestic	51.8	100.0	114.5	160.2	224.8
foreign	0.8	4.2	-14.1	-17.6	-28.1

Source: The Statistics Korea, KOSIS database.

REFERENCES

Blackburn, M. (1989), “Interpreting the Magnitude of Changes in Measures of Income Inequality,” Journal of Econometrics, no.42.

Blanchard, O. and F. Giavazzi (2003), “Macroeconomic Effects of Regulation and Deregulation in Goods and Labor markets,” Quarterly Journal of Economics, 897-907.

Blau, Francine D. and Lawrence M. Kahn, “Understanding International Differences in Gender Pay Gap,” Journal of Labor Economics, 21(1), 106-44, 2003.

Blau, Francine D. and Lawrence M. Kahn, “Inequality and Earnings Distribution,” Chapter 8 in Salvera, Wiemer, Brian Nolan, and Timothy M. Smeeding eds., The Oxford Handbook of Economic Inequality, Oxford University Press, 2009.

Brandolini, Andrea and Timothy M. Smeeding (2009), “Income Inequality in Richer and OECD Countries,” Chapter 4 in Salvera, Wiemer, Brian Nolan, and Timothy M. Smeeding eds., The Oxford Handbook of Economic Inequality, Oxford University Press, 2009.

Checci, D. and C. Garcia-Penalosa (2005), “Labor market Institutions and the Personal Distribution of Income in the OECD,” IZA Working paper, DP no.1681.

Daudey, E. and C. Garcia-Penalosa (2007), “The Personal and the Factor Distribution of Income in a Cross-section of Countries,” Journal of Development Studies, 43(5): 812-29.

De Serres, A., Scarpetta, S., and Maisonneuve, C., 2002, “Sectoral Shifts in Europe and the United States: How they Affect Aggregate Labor Shares and the Properties of Wage Equation,” OECD Economics Department Working Papers No.326.

European Commission, 2008. Employment in Europe. Brussels: European Commission.

EU, IMF, OECD, UN, WB, System of National Accounts 2008, New York, 2009.

Expert Group on Household Income Statistics – the Canberra Group (2001), Final Report and Recommendations, Ottawa, The Canberra Group.

Glyn, Andrew, "Functional Distribution and Inequality," Chapter 5 in Salvera, Wiemer, Brian Nolan, and Timothy M. Smeeding eds., The Oxford Handbook of Economic Inequality, Oxford University Press, 2009.

Gottschack, Peter, and Smeeding, Timothy M. 1997. "Cross-National Comparisons of Earnings and Income Inequality," Journal of Economic Literature, 35(2): 633-87.

Guscina, Anastasia, 2006, "Effects of Globalization on Labor's Share in National Income," IMF Working Paper WP/06/294.

IMF, 2007. 'The Globalization of Labor.' World Economic Outlook, April, chapter 5.

Lam, D. 1997, "Demographic Variables and Income Inequality," in M.R. Rosenzweig and O. Stark eds., Handbook of Population and Family Economics, Elsevier Science.

OECD, 2007. 'OECD Workers in a Global Economy: Increasingly Vulnerable?' OECD Employment Outlook, July, Chapter 3.

OECD, Growing Unequal?- Income Distribution and Poverty across OECD Countries, Paris, OECD, 2008.

Park, Hyung-soo, The Korean Economic and Fiscal Model: KEFM02, Korea Institute of Public Finance, research report 02-03, December 2002. www.kipf.re.kr

Piketty, T. and Saez, E., (2007), "Income and Wage Inequality in the USA," in A.Atkinson and T. Piketty (eds.) Top Income over the Twentieth Century, Oxford: Oxford University Press

Pyatt, G., Chen, C.N., and Fei, J. (1980), "The Distribution of Income by Factor Components," Quarterly Journal of Economics, 95: 451-73.

Rowthorn, R. 1999. “Unemployment, Wage Bargaining and Capital Labour Substitution,” Cambridge Journal of Economics, 23: 413-25.

Salvera, Wiemer, Brian Nolan, and Timothy M. Smeeding eds., The Oxford Handbook of Economic Inequality, Oxford University Press, 2009.

Improving Employability of Workers at the Margin

Soo Kyeong Hwang (KDI)

1. Introduction

☐ The youth, women and the middle-aged and aged are the representative employment-vulnerable groups of the Korean labor market.

☐ The practices of male-dominated employment (aged 30~54) which were strengthened during the fast growth between the 1970s and 1980s have lingered in Korea until today.

◦ At the early stage of economic development mainly led by light industry in the 1970s, there was a temporary high dependence on less-educated female workers, but afterwards, this labor supply structure were transformed by industry's structural change and women getting more advanced education.

◦ In accordance with social and cultural terms of the male breadwinner model, the gender role structure has been further strengthened with men involving market labor and women involving non-market labor (child bearing + household chores).

◦ The labor force participation rates of the youth and women remain very low in Korea, compared to other countries, and that of the aged is high, although the majority of the aged workers belong to the peripheral market.

☐ The employment structure with heavy dependence on core male workforce is hard to be sustained any longer due to the rapid pace of low birth rate and aging population since the 2000s.

◦ Influenced by more women getting advanced education and higher awareness of social participation, women's labor force participation has risen gradually.

◦ Since the foreign exchange crisis from 1997 to 1998, the employment stability of core male workforce has weakened, thereby increasing the need for an additional income earner other than male householder within the family.

◦ Korea entered the stage of an aging society in 2000, and the proportion of core workforce (aged 30~54) has already been on the decline since 2010.

□ The future of Korea's labor market can be seen to be up to how to well manage the employment-vulnerable groups, such as the youth, women and the aged, under various different conditions.

◦ Appropriate responsive measures need to be developed based on in-depth examination of fundamental reasons behind employment problems facing each group of the youth, women and the middle-aged and aged.

2. Direction of Youth Employment Policy

1) Current Status on Youth Employment and Problems of Potential Unemployment

□ The worsening of youth employment is probably more due to job mismatch, than to the shortage of jobs.

□ In Korea, the unemployment of the youth (aged 15~29) recorded as of 2011 7.6% (9.0% for male, 6.4% for female), which is higher than twice that of entire age groups with 3.4% (3.6% for male, 3.1% for female).

◦ However, a high unemployment rate of the youth is quite common in most other countries, and Korea's rate is relatively lower than OECD nations.

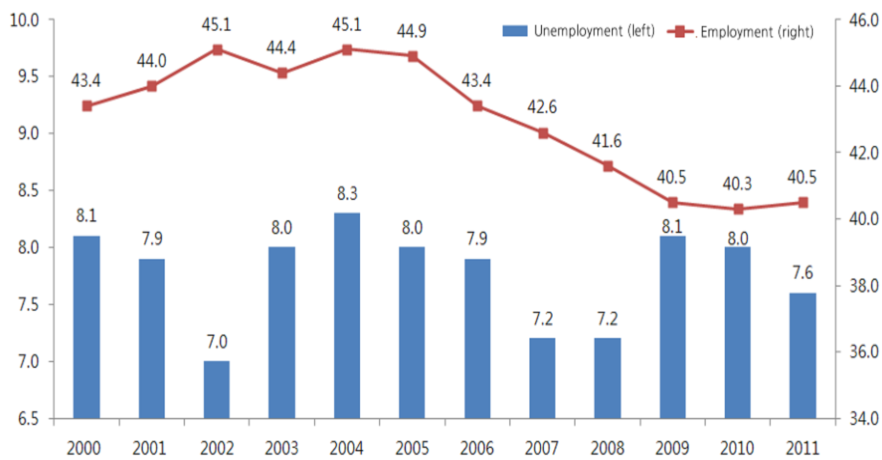
◦ Korea's unemployment rate of the youth today is not very different from the level in the early and mid 2000s, which suggests that the change in the unemployment rate alone does not serve as evidence of the youth employment crisis getting worse than before (Figure 1).

	Unemployment Rate (%)			Employment Rate (%)		
	Total	**Make**	**Female**	**Total**	**Male**	**Female**
The Youth	7.6	9.0	6.4	40.5	38.8	42.1
15 ~ 19 yrs.	10.8	12.2	9.7	6.8	5.5	8.1
20 ~ 24 yrs.	9.4	12.1	7.8	43.5	37.2	48.2
25 ~ 29 yrs.	6.5	7.7	5.0	69.7	71.6	67.8
All Age Groups	3.4	3.6	3.1	59.1	70.5	48.1

Source: *Economically Active Population Survey*, Statistics Korea

	Korea	France	Germany	Italy	Japan	Sweden	UK	US
Unemployment Rate	8.0	17.0	9.1	20.2	8.1	18.6	14.4	15.0
Employment Rate	40.3	46.6	56.9	34.5	54.0	50.4	60.8	55.0

Source: *Labour Force Statistics*, OECD



☐ Meanwhile, the youth employment recorded as of 2011 40.5% and showed a sharp fall in the late 2000s.

◦ The youth employment fell by even 4.6%p over the past six years (45.1% in 2004 → 40.5% in 2011), which is lower by 10～20%p than leading OECD nations.

◦ Low rates of both unemployment and employment suggest that the youth account for quite a large amount of economically inactive population in the labor market of Korea.

□ Korea's high enrollment in advanced education (84% as of 2008) has pointed out as one of the possible reasons to increase the population of the economically inactive youth.

◦ However, in the age group between aged 15 and 24 years old, the proportion of enrolled students in Korea is higher than that in other countries, but the ratio is reversed in the group between aged 25 and 29 years old. In terms of the entire youth group, little difference is found in the international comparison.

	Korea	France	Germany	Italy	Sweden	UK	US
Total (youth)	47.1	41.2	47.7	40.0	52.5	35.2	42.6
15 ~ 19 yrs.	88.5	85.6	88.7	82.2	86.1	72.6	80.8
20 ~ 24 yrs.	50.7	32.5	41.7	34.2	40.9	24.2	34.7
25 ~ 29 yrs.	9.8	6.2	15.4	10.2	25.5	9.5	11.9

Source: UNESCO-OECD-Eurostat (UOE) data, OECD

□ Such high ratio of economically inactive youth population in Korea is largely attributable to the existence of a large number of latent unemployed persons, also known as 'employment preparer,' who are not identified as unemployed.

◦ According to the Korean terms of unemployment, people who prepare for public examinations or attend vocational training centers are not considered to be involved in job seeking activities, hence categorized as economically inactive, not unemployed.

◦ The proportion of employment preparer accounts for 8.1% of the economically inactive youth population, and the figure goes up to 25% among the age group between aged 25 and 29 years old.

◦ The number of employment preparer has been on a rapid rise since 2003, and it seems that over time, along with the accumulative number of preparers, they have spend increasingly more time on preparing

- Recent data reveal a sharp increase in employment preparers in their 30s.

	2003	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Total (youth)	5.0	5.8	6.9	7.9	7.8	8.4	7.8	8.1
15 ~ 19 yrs.	0.7	0.5	0.6	0.3	0.4	0.3	0.4	0.4
20 ~ 24 yrs.	8.4	10.2	11.8	13.5	12.1	13.0	12.0	13.6
25 ~ 29 yrs.	11.7	14.0	17.9	21.9	23.6	25.5	24.4	24.7

Source: Raw data from the Economically Active Population Survey, Statistics Korea

☐ The extended unemployment rate, which includes employment preparers as latent unemployed persons, turns out to be more than twice the official unemployment rate (Table 5).

◦ The ratio of extended unemployment rate to official unemployment rate rose consistently from 1.6 to 2.1 between 2003 and 2010.

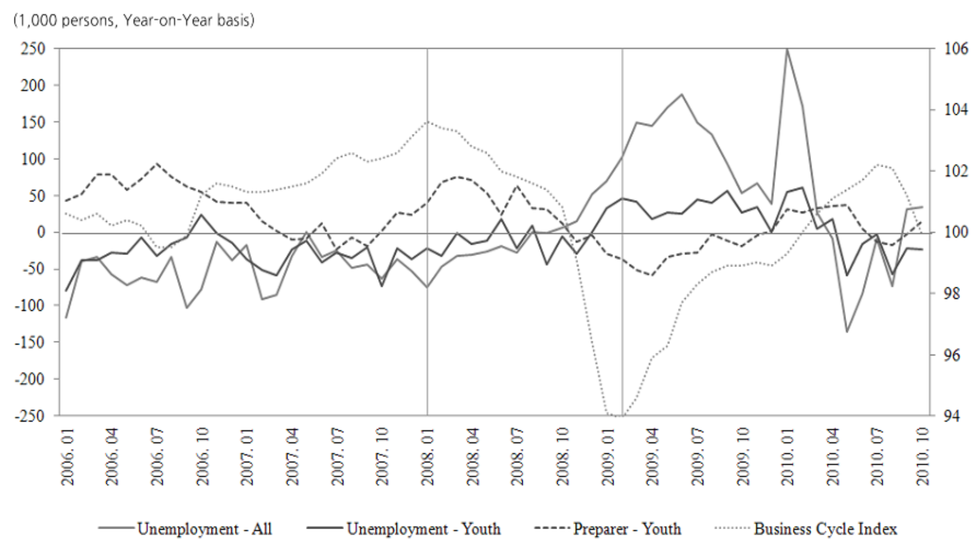
	The Youth		**15 ~ 19 yrs.**		**20 ~ 24 yrs.**		**25 ~ 29 yrs.**	
	UR	**UR+**	**UR**	**UR+**	**UR**	**UR+**	**UR**	**UR+**
2003	8.0	12.7	13.0	18.3	9.6	15.0	6.3	10.4
2004	8.3	13.4	14.1	18.2	9.9	16.0	6.5	11.0
2005	8.0	14.2	12.5	17.3	9.9	17.1	6.4	12.0
2006	7.9	15.4	10.4	14.0	9.9	19.0	6.5	13.4
2007	7.2	15.1	9.3	13.6	8.7	17.7	6.3	13.8
2008	7.2	15.8	10.2	14.3	9.2	19.6	6.0	14.1
2009	8.1	16.4	12.3	17.5	9.5	19.4	7.1	14.9
2010	8.0	16.7	11.9	16.4	9.5	20.7	7.0	14.7

*Note: UR denotes unemployment rate,, UR+ denotes extended unemployment rate.*Source: Raw data from the *Economically Active Population Survey*, Statistics Korea

☐ It is found that when economic conditions worsen, the number of unemployed persons moves counter to economy, whereas that of employment preparers moves in a pro-cyclical direction.

◦ In time of economic boom, the youth are more likely to choose preparing for employment with the expectation of more job opportunities available when economic conditions improve better. On the other hand, in time of economic slowdown, they tend to choose any job currently available for the concern over fewer job opportunities when economy worsens further.

◦ Such contradicting responses between unemployed persons and employment preparers make it look that the youth employment is comparatively less affected by economic factors.



2) Reform of Labor Market Entry Practices

☐ As shown above, at the core of the problem involving youth employment lay two issues: low employment rate and long waiting period for employment.

□ In Korea, the worsening of the youth employment is not just a problem of job shortage, but of the failure of school-to-work transition caused by the mismatch between education and labor market.

◦ As more and more students enroll university, the number of highly educated youth increases subsequently, but such labor supply structure does not correspond with job structure of the Korean economy, giving a rise to the mismatch in the labor market.

◦ Due to excessive competition over a handful of high quality jobs, it becomes common that more and more young people find themselves in a lengthy waiting line and they increases inefficient investment such as accumulating ‘spec,’ a newly coined word for academic backgrounds and careers in Korea.

□ To deal with problems involving the youth employment requires more than just providing them with temporary, additional jobs, and a medium- and long term perspective with structural responsive measures needs to be developed.

◦ It is urgent to develop measures to reform supply structure so that labor market demand for workforce would be met, and to that end overall educational system needs to be reformed including restructuring incompetent universities.

◦ Measures should be developed to increase the proportion of high quality jobs through overall upgrade of labor market, such as reducing the gap between large enterprises and SMEs and advancing the service industry.

□ Existing recruiting procedures focusing on tests need to be transformed toward career-oriented so that human capital investment for the youth would be encouraged to move in an efficient direction.

◦ Increasing opportunities for high school graduates considerably to curb excess education

◦ Eliminating public employment examinations and giving career applicants bonus points so as to provide incentives to develop substantial capability

◦ Promoting entrepreneurship and developing supportive system so as to encourage the establishment of start-up creative business run by a single person and its early settlement.

◦ It is necessary to explore various methods to change practices involving labor market entry through ways such as producing and distributing various information on employment and labor market, providing job seekers with various experience opportunities including filed works and using the youth internship system as a process for evaluation and recruitment.

3. Direction of Employment Policy on Women

1) Current Conditions on Women Employment and Problems

☐ In Korea, the labor force participation and employment of women aged between 15 and 64 years old recorded 54.9% and 53.1%, respectively, in 2011.

◦ Women's labor force participation and employment rates fell sharply over the two economic recessions in 2003 and 2009, but appear to be on the rise overall.

◦ Still, about a half of female working population remains idle labor force.

	Labor Force Participation Rate			Employment Rate		
	Total	Male	Female	Total	Male	Female
2000	64.4	77.1	52.0	61.5	73.1	50.0
2001	64.8	77.1	52.8	62.1	73.5	50.9
2002	65.6	77.9	53.5	63.3	74.9	52.0
2003	65.4	78.0	52.9	63.0	75.0	51.1

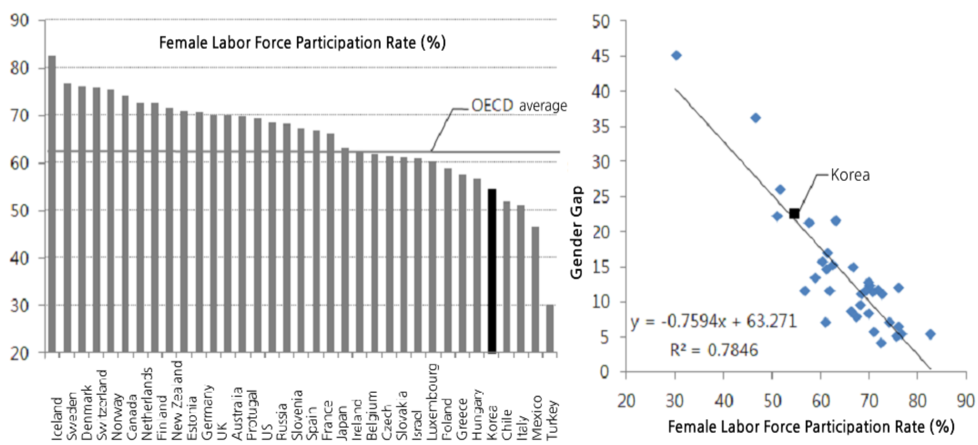
2004	66.1	78.3	54.1	63.6	75.2	52.2
2005	66.3	78.2	54.5	63.7	75.0	52.5
2006	66.2	77.8	54.8	63.8	74.7	53.1
2007	66.2	77.6	54.8	63.9	74.6	53.2
2008	66.0	77.3	54.7	63.8	74.4	53.2
2009	65.4	76.9	53.9	62.9	73.6	52.2
2010	65.8	77.1	54.5	63.3	73.9	52.6
2011	66.2	77.4	54.9	63.8	74.5	53.1

Source: Raw data from the *Economically Active Population Survey*, Statistics Korea

□ Korea's labor force participation rate of women aged between 15 and 64 years old is among the lowest in the OECD, along with Turkey, Mexico, Italy and Chile.

◦ Korea's gender gap in labor force participation rate is gradually declining with a recent 23%, still considered significantly high.

Source: Labour Force Statistics, from OECD.stat, OECD



◦ Male labor force participation rate turns out to be little different from country to country, whereas the rate of female turns out highly different depending on socio-cultural environments surrounding family and gender relationship, labor market practices and institutional conditions, implying that gender gap grow wider under socio-economic conditions unfavorable to women participating in economic activities.

◦ Given the projection of future decrease in working population and labor supply shortage as of the timing of baby boomers' retirement, it is important to substantially increase the use of female labor force from the perspective of national economy.

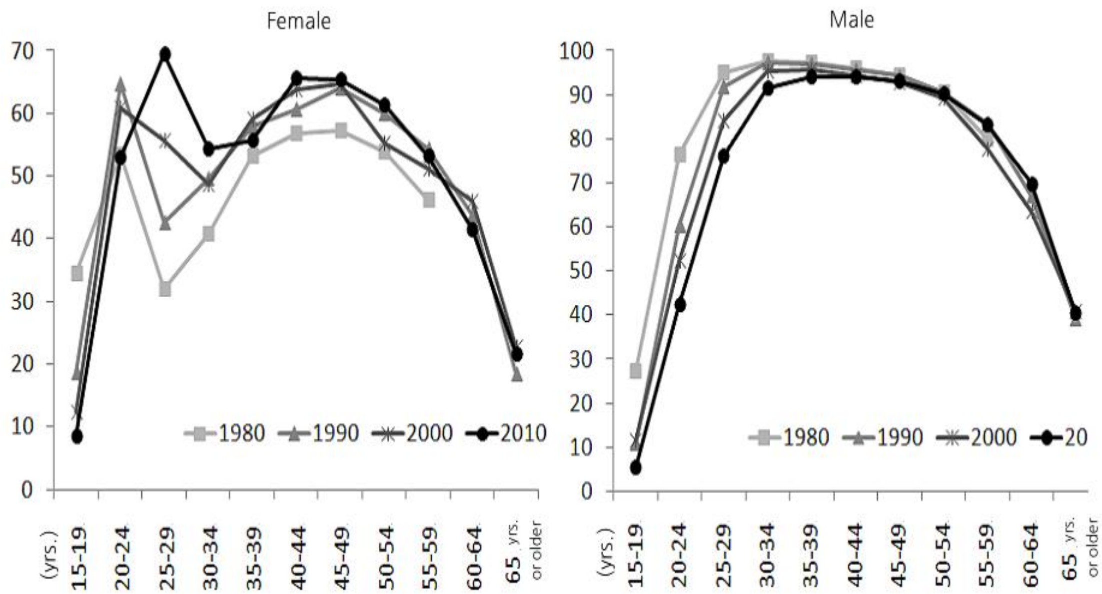
□ In Korea, women's labor force participation shows a "M" shaped pattern.

◦ The labor force participation of women by age group appears to be a M-shaped pattern with a fall in the late 20s or early 30s, which is quite distinguishable from that of men showing an upside down "U" shaped pattern with a constant level from the late 20s to the early 50s (Figure 4).

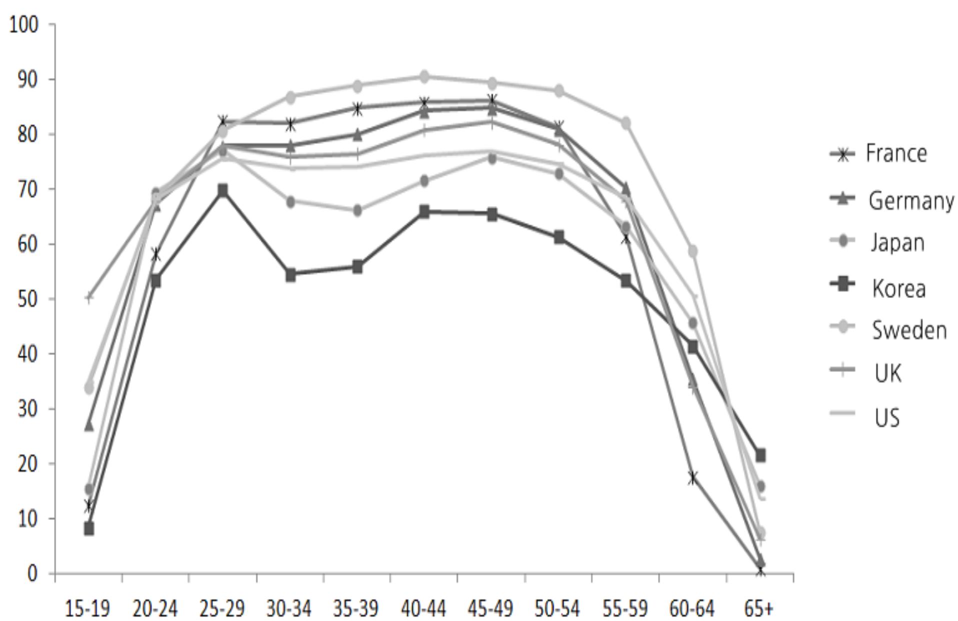
◦ In most advanced countries, a "M" pattern, or bimodal structure, of female labor force participation was witnessed until the 1960~1970s, but has been disappearing since the 1980s.

◦ Sweden witnessed the "M" pattern be disappearing in female labor force participation after the 1970s, and the US even posted an upside down "U" pattern similar to that of men since the 1980s.

◦ Among OECD nations, Korea and Japan are the only nation that still shows the "M" pattern in female labor force participation (Figure 5).



Source: *Economically Active Population Survey*, Statistics Korea, each year.



Source: Labour Force Statistics, from OECD.stat, OECD

☐ The "M" pattern of female labor force participation indicates that many women give up their work at certain point of time for heavy burdens of child birth and rearing.

◦ This pattern represents typical characteristics of female labor supply in Korea, which was created by the gender role structure within household.

☐ Employment policy on women so far has been on reducing the burdens of child birth and rearing, which has actually produced only negligible effects on improving the labor force participation rate of women in their 30s.

◦ Without considering labor market condition changes resulting from women's working hour constraints for giving birth and rearing their young, it is hard to expect any meaningful, sufficient policy effects from respective and individual supports for childbirth and rearing.

☐ Given the projection of future decrease in working population and labor supply shortage as of the timing of baby boomers' retirement, it is important to substantially increase the use of female labor force from the perspective of national economy.

2) Women's Work-Life Balance

☐ Women is given heavy working hour constraints in the labor market, since it is usually women who are held accountable for household chores including child rearing (Table 6).

◦ Therefore, when women are unable to reduce their working hours during the period of weighing heavy burdens of child rearing and household chores, they would be left with no choice but to leave the labor market completely.

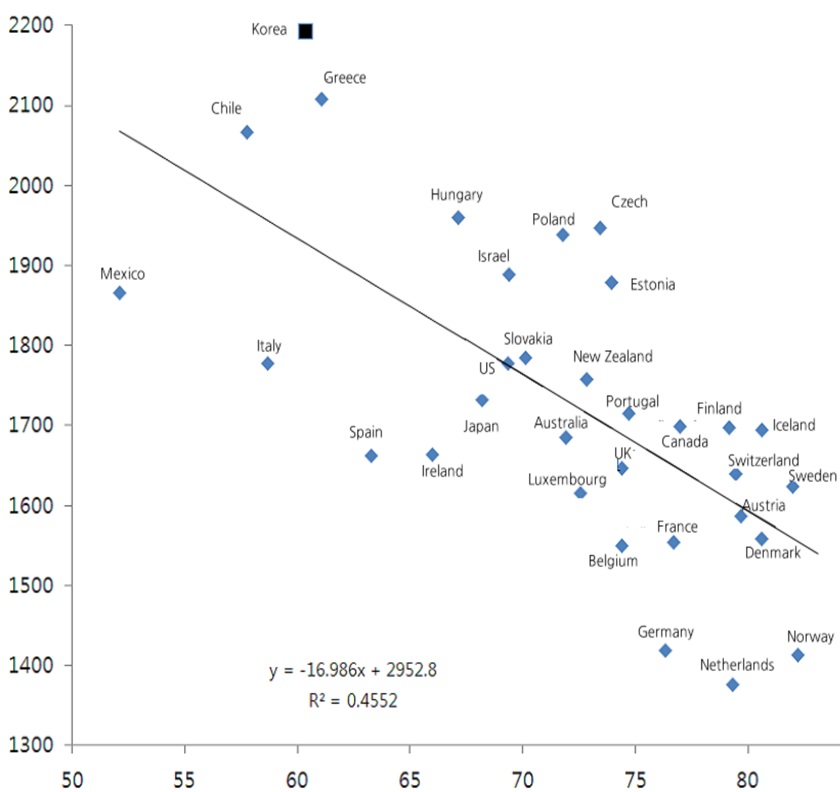
◦ In this regard, for these married women feeling time constraint, fewer working hours and larger discretion are the prerequisites to achieving a work-life balance.

	Labor Market	Household Chores	Total Labor	Leisure	Personal Care	Total Hour
Male	49.3 (29.4)	6.0 (3.6)	55.3 (32.9)	36.2 (21.5)	76.5 (45.5)	168 (100.0)
Female	26.5 (15.8)	31.8 (18.9)	58.3 (34.7)	34.5 (20.5)	75.2 (44.8)	168 (100.0)

Source: *Time Use Survey*, Statistics Korea, 2009

☐ Looking into the relationship between the annual average working hours and the employment rate in OECD nations reveals that a nation with longer hours posts a low rate of female employment (Figure 6).

◦ In Korea, the working environment asking for longer hours at workplace may be one of main reasons that serve to block married women from participating in economic activities (under-employment of female workforce under the condition of long-term working hours).



Source: Labour Force Statistics, from OECD.stat, OECD

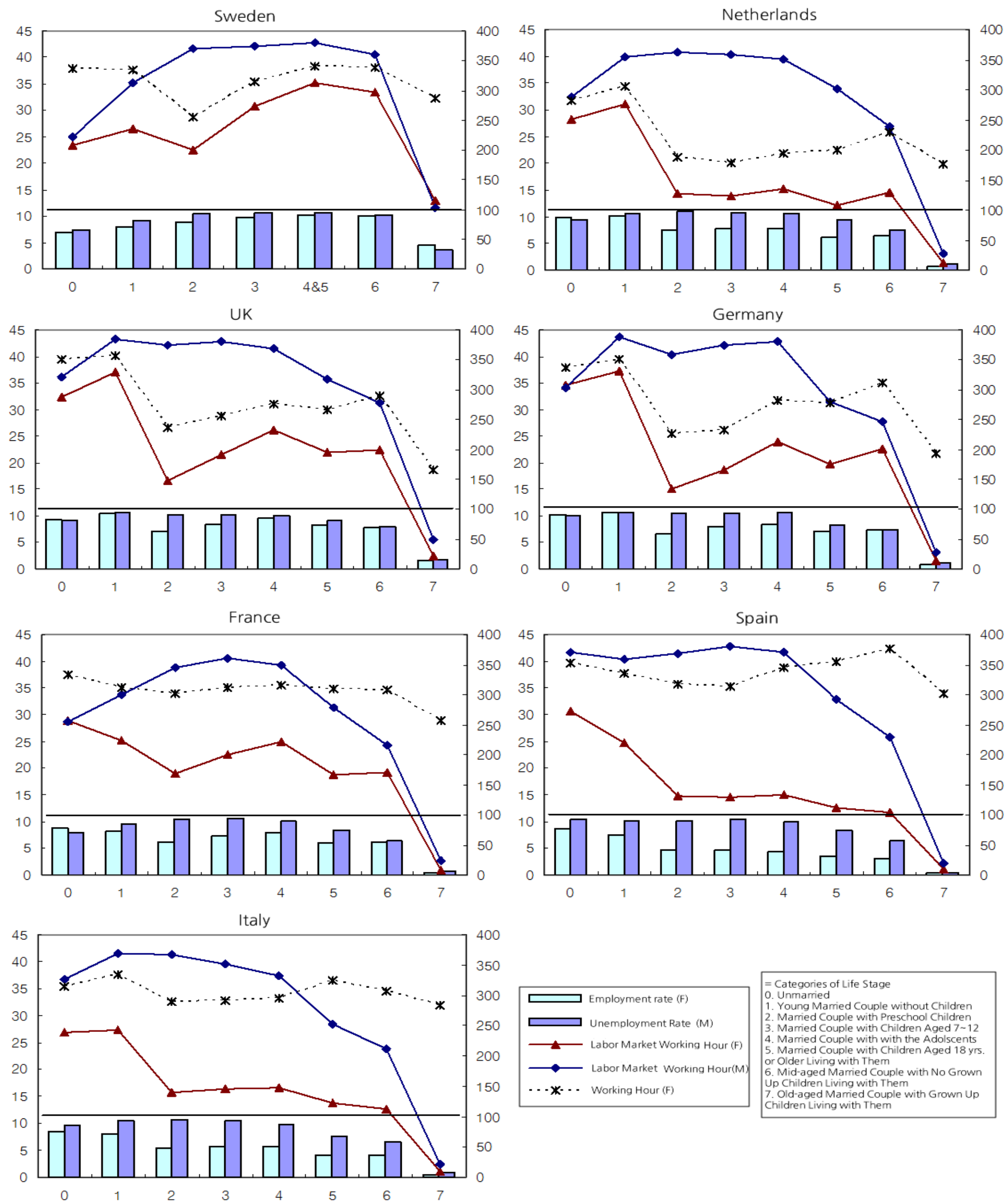
☐ International comparison of labor supply of women by life cycle (EU, 2006; Anxo et al., 2007)

◦ Households from seven European nations are divided according to their life cycle, and then their labor market hours of married couples, employment rate and working hours of employed persons are compared (Figure 7).

◦ Based on characteristics found in women's employment rate and their working hour scheduling in the labor market throughout the entire life cycle, it is made possible to formulate typical patterns of surveyed nations.

◦ <u>Popular dual earner pattern (Sweden)</u>

- Women's employment rate remains at a high level through the entire life cycle, although their labor market working hour is comparatively shorter than their spouse.
- Women raising preschool children reduce their labor market working hours considerably, and as a way to solve time constraints, mother chooses a part-time position while maintaining their employment. Later, when children grow up to reach school age, mother chooses a shift for a full-time position. In other words, this is the system which allows women choose a shift between full- and part-time positions, through which women's certain employment level has been maintained.
- In terms of the entire labor market, the proportion of part-time employment itself is not comparatively high.
- Most Northern European nations, such as Norway and Iceland, show similar patterns to this.



Source: Working time options over the life course, EU(2006)

◦ <u>Female part-time worker pattern (The Netherlands, UK, Germany)</u>

- Women's employment rates in these countries are lower than Sweden, but they remain at a comparatively high level throughout the entire cycle.

- Women with preschool children experience a sharp fall in their working hours in the labor market and their employment rate as well decreases, but the employment rate itself does not decrease very sharply during this period and later turns to rise back close to the previous level.
- Meanwhile, married women are more likely to be employed as a part-time worker than a full-time worker, and therefore the proportion of female part-time workers turns out to be very high in these countries.
- Women in these countries are given the gender role so that they would be able to put in comparatively longer hours in household chores than in the labor market. Women's employment rate in these countries has been largely supported by female part-time workers.
- The Netherlands, in particular, adopted a so-called 'part-time employment model (employment of 1.5 persons per couple family),' under which one parent is employed part time while the other full-time. Supported by this model, the Netherlands increased women's employment rate significantly and reduced unemployment rate to a 3% level throughout the 1980s and 1990s, delivering successful accomplishments in the labor market.

◦ <u>Slightly Male breadwinner-focused pattern (France)</u>

- In Europe, France is among the nations that have relatively low employment rate and high proportion of part-time workers.
- Upon marriage, women starts to leave the labor market, and the number of women leaving their work increases further while raising preschool children, pulling down women's

employment rate drastically. Some of these women return to the labor market, but the number of returning mothers is not as many as those who left in the first place.

- Unlike the UK and Germany, the labor market of France is structured mainly by full-time workers, and most of female employees are full time workers.
- Since there are not many part-time jobs available, married women experience comparatively more limitations to return to the labor market.

◦ <u>Choice between Full-time and Leaving the Labor Market (Spain, Italy)</u>

- The employment rate of women records the lowest, and women with preschool children showed a particularly high rate of leaving the labor market. Women in these countries show little possibility of returning to the labor market, once they left it, and even additional number of women turned out to be leaving.
- The labor market of these countries is based on the employment of full-time workers, which leaves women with only two choices between continuing full-time employment or leaving the market at the time of facing growing burdens of household chores
- In other words, the labor markets of these countries have the characteristics of clear gender distinction, resulting in men working for longer hours and less women participating in economic activities.

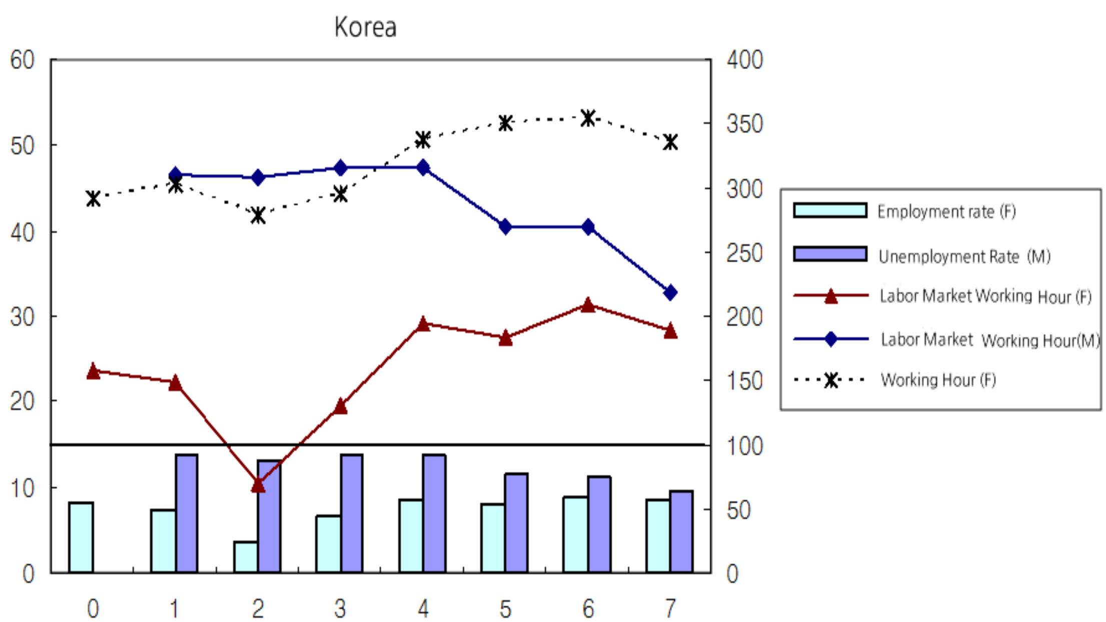
□ In any country, women tend to reduce their working hours in the labor market and spend more time in household chores in the face of growing burden of child-rearing.

◦ Such tendency, though to different degrees, has been commonly observed in most countries, and distinctive differences between countries are found regarding whether women continue economic activities or not while raising their children, whether they return to the labor market or not once their children grow up old enough to require less time of their mother, and whether they are employed full-time or part-time in the case of returning mothers.

☐ From this perspective, the labor market of Korea can be seen as similar to that of Spain and Italy, in the sense that the full-time employment with long working hours is prevalent, which causes a large number of women quit their job when faced by heavy burden of household chores.

◦ Korea's labor market also has similar characteristics as France in the sense that women's employment rate shows partial improvement after child-rearing period.

◦ The actual working hour of female employees in Korea is longer by five to ten hours than those in Spain and Italy, implying that Korean women's desire to participate in economic activities is comparatively strong, but labor market conditions have not been of great support.



Source: Korean Longitudinal Survey of Women & Family, 2008

3) Policy Direction to Increase Women's Employment Rate

☐ The Korean society now faces problems concerning labor market: the weakening of potential power to generate employment in labor demand side and the population aging and workforce shortage in labor supply side. In this regard, improving the use of female workforce has been regarded as a priority challenge.

☐ The Korean society now faces the challenge of increasing women's employment rate and overcoming the low birth rate at the same time.

◦ Since entering the phase of aging society in the 2000s, Korea witnessed its birth rate fall to the super low 1.2 births per 1,000 population. Now, Korea is expected to experience the unprecedentedly fast paced population aging; aged society in 2017 and super-aged society in 2026.

◦ In the perspective of responsive policy, those two policies of reducing child-rearing burden through maternity leave and increasing public child care facilities and of supporting a life to work balance through increasing part-time employment could serve as alternatives to some degrees.

	Labor Force Participate Rate	Proportion of Part-time Workers	Child Care Supports	Birth Rate
Sweden	77.7	19.0	4.0	1.6
Denmark	76.7	25.6	4.4	1.8
Finland	73.2	14.9	1.5	1.7
UK	70.3	38.8	-0.9	1.7
The Netherlands	69.4	59.7	0.3	1.7
US	69.3	17.8	0.1	2.0
Australia	69.0	40.7	-2.6	1.8
Germany	68.5	39.2	-0.6	1.3
France	63.9	22.9	1.7	1.9
Spain	61.1	21.4	-0.4	1.2
Belgium	58.9	34.7	1.2	1.7

Italy	50.8	29.4	0.4	1.3

Note: 1) Women's labor force participation rates are based on women aged between 15 and 64 years old as of 2006, *OECD Employment Outlook* 2007.

2) The proportion of part-time workers is as of 2006, *OECD Employment Outlook* 2007.

3) Child care supports are the indexed form of child care coverage and maternity benefit on the sliding scale from –5 to 5. Refer to Table 4.9, *OECD Employment Outlook* 2001.

4) Birth rate is based on the total of 2000~2005 data, *World Population Prospects*, UN 2005.

◦ Northern European nations, such as Sweden and Norway, has maintained high level of women's labor force participation and childbirth rates by supporting the conditions where women are employed full-time and government takes the responsibility of child-rearing. On the other hand, the Netherlands has reformed laws and regulations in order to encourage part-time employment and also has worked to accomplish women's life to work balance by actively enabling a flexible working hour system (Table 8)

◦ Meanwhile, in the labor market mainly supported by full-time employment with long working hours, such as Spain and Italy, women with children to take care of would encounter severe limitations in employment, and not only that, the increase in women's employment would lead to a large fall in birth rate.

□ For Korea, it would be the policy choice of great significance between full-time employment-focused (Sweden and the US) and short-time employment-focused (Central Europe such as the Netherlands) so as to increase women's employment.

◦ Considering that Korea has a typical pattern of male as a breadwinner and women as the primary person responsible for child-rearing and household chores, it seems that to increase short-time working and discretionary working hour could be an effective method.

◦ For Japan with most similar social and cultural backgrounds and labor market structure as Korea, women account for 30.5% of part-time employment and 67.6% of employment, higher by approximately 20%p and 10%p, respectively, than Korea.

☐ The government needs to focus000e its policy efforts in a direction toward increasing jobs with life to work balance which has less working hours and more discretion

◦ Policies need to put a priority on increasing jobs supporting the work to life balance in public sector and large enterprises so that concerns about the possibility that increased short-time labor and flexible working hour would contribute only to producing marginal jobs would be diminished.

◦ For companies which have long been accustomed to male-dominated employment practices and therefore have poor experiences with increasing a discretionary room for working hours or managing and recruiting part-time employees, it is necessary to provide them with certain incentives by suggesting a work to life balance model and supporting the rise in personnel expenses brought by the increase in fixed expenses.

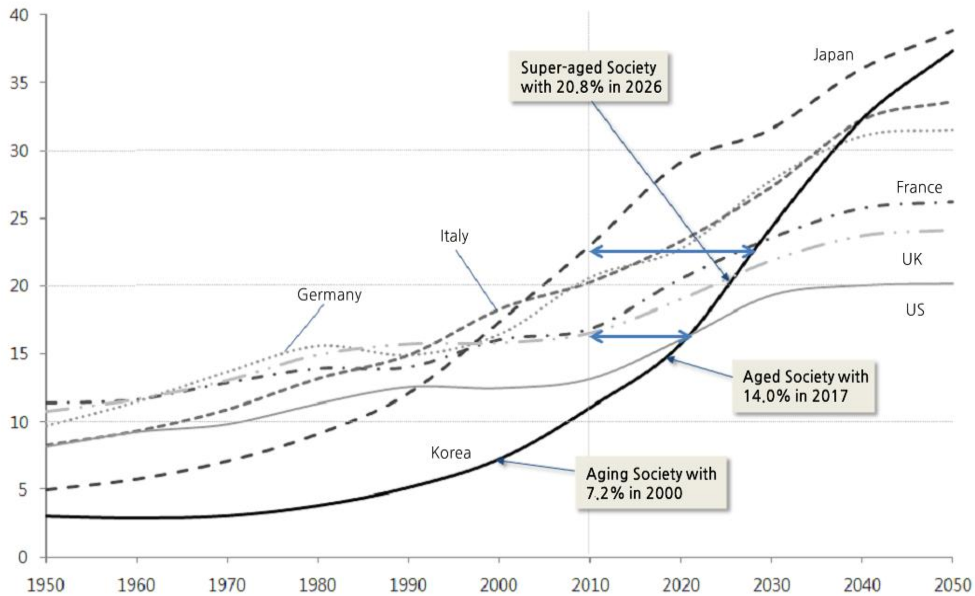
4. Policy Direction of the Middle-aged Employment

1) Population aging and changes in labor market structure

☐ Korea is forecast to become an aged society with those aged 65 years old or older accounting for 14% of the total population in 2017, to a super-aged society in 2026, and then to one of the oldest nations 30 years later along with Japan, going far beyond that of OECD nations.

◦ As the population grows older, the median age of Korean public has risen at a fast pace to reach 28 years of age in 1090, 38 years of age in 2010, and is expected to reach 50 years of age in 2032.

◦ The number of working-age population (aged 15~64) is expected to decline gradually after its peak in 2016, and core productive population (aged 25~49) has already been on the decrease since 2010.



Source: *OECD Employment and Labour Market Statistics* (http://stats.oecd.org/)

	1990	2000	2010	2020	2030	2040	2050	2060
Old Age Dependency Ratio (%)	7.4	10.1	15.2	22.1	38.6	57.2	71.0	80.6
Median Age (yrs.)	27.0	31.8	37.9	43.4	48.5	52.6	55.9	57.9

Source: *Population Projection*, Statistics Korea, 2011

□ Influenced by fast-paced low birth rate and population aging, seismic changes have been observed in the demographic age structure of labor forces (Table 10).

◦ Since the supply of the youth workforce remained abundant up until the 1980s, the proportion of middle aged workers (aged 55 or older) accounted for only 10% level, but entering the 2000s, the youth labor supply declined rapidly and the number of middle aged workers increased sharply, implying the fast-paced aging of the labor force structure.

◦ The average age of the employed has risen at a fast rate from 37.3 years of age in 1982 to 40.3 in 2000, then to 43.7 in 2011.

◦ Such trend implies that it would not be possible any longer to use the workforce with a focus on core productive population (aged 30~45).

	1963	1970	1980	1990	2000	2010	2011
15-29 yrs.	40.2	36.1	34.8	28.7	23.9	17.1	16.7
30-54 yrs.	51.2	54.6	54.9	58.0	61.2	63.7	63.2
55 yrs. or older	8.6	9.3	10.4	13.3	14.8	19.2	20.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: *Economically Active Population Survey*, KOSIS, Statistics Korea, each year (based on one-week seeking period)

☐ Considering that the labor force structure will experience changes in the future, it is necessary to build a system that allows more population including women and the aged to continue their participation in economic activities.

◦ In particular, the longer the aged remain in the labor market, the less the supporting cost will be after they retire, meaning that it could result in effects of simultaneous responses to labor shortage and rapidly growing fiscal burdens.

2) Resignation and Retirement Status of the Aged

☐ According to the 2009 status survey released by the Ministry of Employment and Labor, 94.7% of workplaces with 300 employees or more have the mandatory retirement system under operation and 80% of surveyed enterprises have the retirement age set under the official retirement age (60 years old) of the National Pension.

◦ The Aged Employment Promotion Act stipulates the regulation of setting the retirement age higher than 60 years old, but little improvement has been made since the regulation is not legally binding.

◦ The average retirement age set by companies is currently 57.2 years old, and it has remained almost the same up until today since 2000. .

※ 57.2 yrs. in 2000 → 56.7 yrs. in 2003 → 56.9 yrs. in 2006 → 57.1 yrs. 2008 → 57.2 yrs. in 2009

◦ However, the actual age of leaving appears to be younger than the official retirement age, as corporate restructuring has occurred on a regular and frequent basis, cases of early or voluntary retirement have become common (Figure 10)

Note: Number of retirees by age group and the number of workers who change jobs for reasons of old age or voluntary and early retirement and layoffs

Source: Raw data from the *Economically Active Population Survey*, Statistics Korea, each year

□ As for Korean workers, the average age of resignation is around 54 years old, and that of retirement is around 68 years old.

◦ This shows that after resigning from their main jobs, Korean workers spend approximately 14 years on average working for the second job.

◦ However, the labor market for the middle-aged and aged persons consists of mostly self-employed and low-skilled jobs, making it difficult to find jobs that fit their work experiences and skill levels, hence a rapid fall in income.

◦ It is often the case that they end up with a huge financial loss after attempts of start-ups using their severance pay, which has posed a significant risk to the later life of the aged resigning from their work.

	Age at which workers resign from their main job	Retirement age of surveyed companies	Duration of the second working life cycle	Age at which workers retire completely
Total	54.1 yrs.	56.0 yrs.	14.0 years	68.1 yrs.
Men	54.4 yrs.	56.0 yrs.	12.9 years	67.3 yrs.
Women	53.8 yrs.	56.0 yrs.	14.5 years	68.3 yrs.

Source: Hanam Phang *et al.* (2009), p. 35.

□ At present, the age of eligibility for the National Pension is 60 years of age, which is set higher than the average retirement age, and such inconsistency between the retirement and pension systems has served to produce a pension gap.

◦ In other words, Korea's current system itself is designed to force retired people to continue working for some time until they reach the eligible age.

◦ The pension gap is what forces many of retired workers to participate in economic activities again only to sustain their livelihood until pension age.

◦ The age of eligibility for the National Pension is scheduled to be extended to 61 years old in 2013 and also extended by one year every five years to reach 65 years old in 2033, indicating that the gap between the retirement age and pension-eligible age could widen further.

3) Policy Agenda for Stable Employment of the Aged

□ The fast-paced population aging of the Korea society has triggered concerns in the labor market over the possibility of a severe fall in the number of active labor forces (aged between 25 and 54) and the labor shortage after the 2020s.

◦ It is expected that the society will see social burdens and the poor aged people emerge as serious issues, including the reduced fiscal space for pension and long-term depletion and the rise in medical costs.

◦ Now is the time to put in more active policy efforts to promote the employment stability of the aged in preparation for an aged society.

□ To remove the pension gap and strengthen the employment stability of the aged requires the reform of the existing system whose retirement age is set at an overly low level, and this needs to be implemented with a priority.

◦ In terms of life cycle perspective, now that the average life span is probably extended to 85 years of age or older, it is no longer possible to continue the existing pattern of working in the main job only for a third of life cycle and then working in odd jobs or simply subsisting on personal savings for the remaining period.

◦ The aged will face inevitable limitations in adapting to new jobs after leaving their jobs that they had for almost a whole life, and therefore when it is possible for them to continue their old jobs, their corporate-specific skillfulness could be of a great use so that Pareto efficiency will be achieved across economy in overall.

◦ In order to correct a system failure, it is necessary to secure the consistency between the retirement and pension systems by making it mandatory not to set the retirement age below the pension age.

□ Enabling the aged workers to work for their main jobs for a longer period of time requires the establishment of the aged-friendly employment system in terms of working hour and pattern.

◦ When the aged-friendly working environments are provided with improvements in labor intensity and lengthy working hour, which are deemed to be major stumbling block to the employment of the aged workers, it is likely that the aged will maintain a work-life balance and become highly productive for much longer

◦ To that end, it is necessary to consider following policy measures; 1) to support projects for improved working environments to help gradual retirement, 2) to allow more discretion with the choice of working time and to further encourage regular part-time employment, 3) to adopt the right to demand the reduction in working hours at a certain point of time prior to the resignation so as to allow working time adjustment, and 4) to mandate the education for preparing the retirement and to grant paid vacations.

□ the middle-aged and aged who resigned their main job should be encouraged to find reemployment through developing employment capability such as supporting job turnover and vocational training and through providing them with recruitment services that suit characteristics of consumers.

◦ Now that continuous employment is hardly available, it is important to provide workers with certain-period retirement education right before their retirement (resignation) so that they are prepared beforehand. In particular, given that the majority of the middle-aged and aged resigning hope to be reemployed only to sustain their livelihood, it is important to help them prepare for a post-retirement job beforehand.

◦ Other than subsistence employment, it is also necessary to explore and expand new jobs for the retired aged to make contributions to the society such as through social enterprise.

※ Answers to the reason of baby boomers' seeking for job after retirement are as follows: income maintenance (58.5%), health (16.2%), self development (14.4%), the use of leisure time (7.5%), contribution to the society (3.4%), etc.

Policies on the Employment of Foreign Workers: Issues and Challenges

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I. Trends in migration flows

Korea is undergoing a transformation from a traditional migrant-sending country to one that not only sends a large number of students, workers and investors abroad but also attracts foreigners larger in numbers and more varied in type than ever before. Table 1 presents how various groups of immigrants and foreign-borns, notably professional and non-professional workers, marriage migrants(currently the single-largest group of permanent immigrants who have no prior ties to Korea), international students and investors have all contributed to the rise in the last decade[21]. Their total number surpassed one million in 2007 and reached 1.46 million in July 2012, which is equivalent to 2.86% of the total Korean population(and 5.6% of the economically active population). The number as well as the share in the total population of long-term and short-term foreigners staying in the country at any point of time more than doubled in less than 10 years. While the absolute number of foreigners and migrants, and the number of permanent migrants in particular, still remains among the lowest in OECD comparison, it is

[21] Ethnic Koreans with family ties may apply for the F-4 visa for overseas Koreans, which allows them to freely enter and exit the country and engage in economic activities.

increasing at a rapid pace as seen in Figure 1. In 2011 alone, the foreign population grew by around 133,000, continuing an upward trend after the financial crisis.

Table 2 shows foreigners by country of origin in 2011(only those countries with 20,000 and more nationals staying in Korea are listed). Except for the US, Japan, Taiwan and Canada, all others on the list are countries that have signed bilateral labor agreements with Korea. Close to 85% of foreign-born nationals are of Asian origin, with China representing 48.6% and maintaining its position as the top source country by a wide margin. Among Chinese, ethnic Koreans make up more than two-thirds. In addition, about 12% of foreigners are staying in the country illegally. Illegal rates exhibit variations among countries, ranging from just about 2%(Japan) to more than 30%(Thailand, Mongolia).

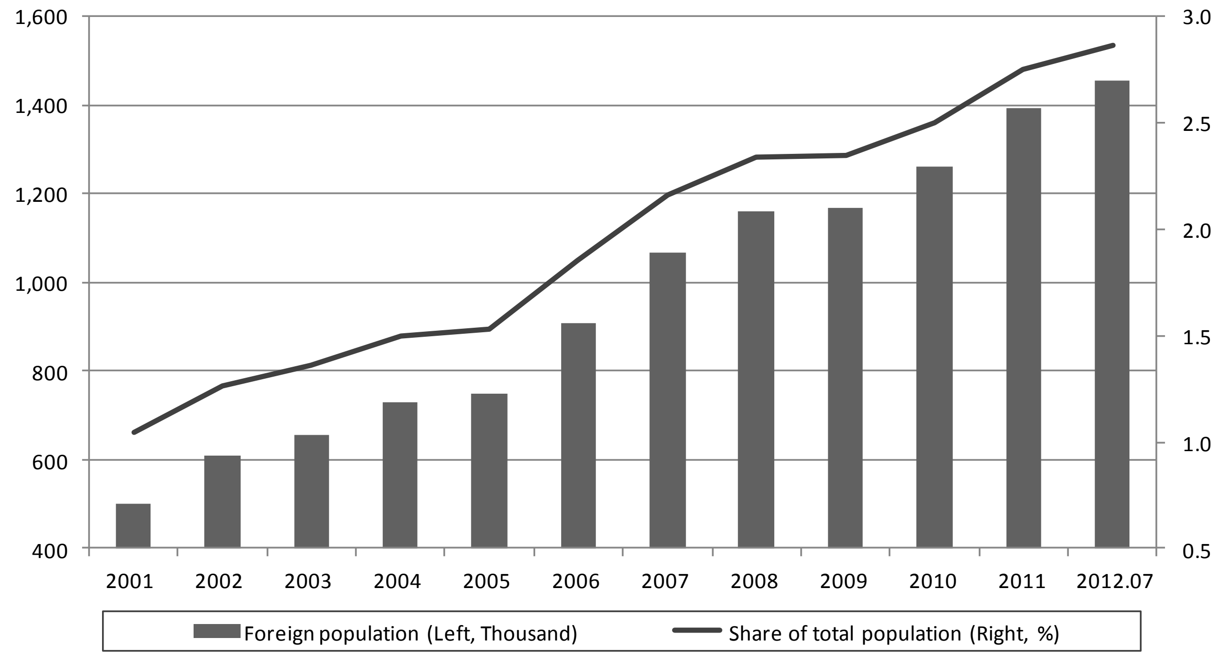
Korea is increasingly becoming a major destination country in Asia for foreign workers. Their inflow started gradually in the late 1980s but it was

Table 1. Numbers of foreigners and immigrants, total and by purpose of entry(visa status).

Year	Total	Marriage migrants	Students	Professional	Non-professional			Investors
			D2 +D4	E1~E7	E9 + H2	E9	H2	D8
2001	501,958	24,949	7,998	20,610	-	-	-	6,594
2002	609,797	34,710	11,308	24,155	-	-	-	7,178
2003	656,380	44,416	13,928	22,431	159,755	159,755	-	5,902
2004	728,339	57,069	19,966	21,729	165,198	165,198	0	6,041
2005	747,467	75,011	27,498	24,785	113,000	113,000	0	7,107
2006	910,149	93,786	42,289	29,011	161,867	161,867	0	7,300
2007	1,066,273	110,362	61,836	33,502	403,687	175,001	228,686	8,109
2008	1,158,866	122,552	75,587	37,304	490,109	190,777	299,332	8,356
2009	1,168,477	125,087	82,374	40,698	494,646	188,363	306,283	7,907
2010	1,261,415	141,654	107,409	43,608	506,905	220,319	286,586	7,557
2011	1,395,077	144,681	104,858	47,095	537,663	234,295	303,368	7,405

Source: Statistical Yearbook on arrivals, departures and immigration policies, Korea Immigration Service, Ministry of Justice, various years.

Figure 1. Total foreign population in Korea. Numbers include illegal residents.



Source: Statistical Yearbook on arrivals, departures and immigration policies, Ministry of Justice, various years.

Table 2. Foreign-born population in 2011 by country of origin.

Nationality	Total	% of total	Legal	Illegal	% illegal
Grand-Total	1,395,077	100%	1,227,297	167,780	12.0%
Asia-Total	1,181,435	84.7%	1,027,529	153,906	13.0%
China	677,954	48.6%	610,920	67,034	9.9%
Korean-Chinese	470,570	33.7%	453,286	17,284	3.7%
Non Korean	207,384	14.9%	157,634	49,750	24.0%
United States	132,133	9.5%	124,657	7,476	5.7%
Vietnam	116,219	8.3%	97,343	18,876	16.2%
Japan	58,169	4.2%	56,933	1,236	2.1%
Philippines	47,542	3.4%	35,679	11,863	25.0%
Thailand	45,634	3.3%	31,539	14,095	30.9%
Indonesia	36,971	2.7%	31,253	5,718	15.5%
Uzbekistan	29,742	2.1%	24,714	5,028	16.9%
Mongolia	28,634	2.1%	18,966	9,668	33.8%
Taiwan	26,316	1.9%	25,366	950	3.6%
Canada	21,812	1.6%	21,098	714	3.3%

Srilanka	21,554	1.5%	18,939	2615	12.1%

Source: Statistical Yearbook on arrivals, departures and immigration policies, Korea Immigration Service, Ministry of Justice, various years.

not until after the Employment Permit System was introduced that a steep rise in their numbers occurred.

The EPS permits low-skilled foreign workers to lawfully enter and work in establishments that operate in prescribed industries and that experience shortage of labor and trouble hiring domestic workers.

Other groups contributed to the expansion of the foreign population in Korea as well, particularly marriage migrants and international students(see Table 1). The number of marriage migrants started to escalate in the mid-1990s and surged in the mid-2000s, when the 'marriage squeeze'(the demographic imbalance in which the number of men and women do not approximately equal) and thus the shortage of prime-age women exacerbated. 9% of all marriages were international in 2011, continuing a gradual downward trend since 2005(when 13.5% of newly-weds consisted of a Korean and a foreign-born). The majority of marriage migrants are women(76.7% in 2011) from China, Vietnam, Japan and the Philippines. China continued to be the top sending country until 2010; that trend changed in 2011 as Vietnamese women took over that spot(Statistics Korea, 2012). The rise in the number of marriage migrants has leveled off in the recent years, spurring projections that Korea in the long-term may not need as many marriage migrants as before(Lee, 2011). In addition, while Korea has one of the lowest fertility rates in the world(1.26 in 2011), replacement migration could be highly controversial and is not actively considered part of the solution yet. Korea has for a long time been an ethnically homogeneous country and maintains to-date few legitimate routes to permanent settlement. The settlement of low-skilled foreign workers, who currently make up the largest group of foreigners in the country, is explicitly prohibited and thus permanent immigration occurs mainly through marriage or by claiming ethnic ties. The marriage route in particular is non-discretionary implying that the government can exercise little control over it. Marriage migrants are however a non-negligible source of foreign labor supply.

The rise in the number of foreign students occurred against the initiation of the 'Study Korea Project' by the Ministry of Education in 2004, which aimed to attract foreign students in order to prop up revenues and further globalization of the Korean post-secondary education system. As a result, the number of foreign students increased five-fold between 2004 and 2011. On graduating from college/university or completing a research course at an academic research institution, students can apply for change of status to obtain a job-search visa that permits them to stay for 2 more years.

From a broad point of view, marriage migrants and some foreign students would need to be considered part of the foreign workforce participating in the Korean labor market. Surveys indicate that around a third of female marriage migrants are already engaging in economic activities and a much higher percentage is expressing a desire to work(Lee *et al*., 2011). While the economic and social impact of these groups deserves sufficient analysis and the importance of it can not be overstated, the discussion in this chapter is confined to labor migrants whose primary purpose of entry is employment and whose inflow is discretionary and can be controlled by policy parameters.

The remainder of this chapter contains a description on the history of labor admission schemes in Korea, details on the current systems, employment structure and labor market impact of foreign workers, and a summary of unresolved issues and future policy directions.

II. Policies for foreign workers in Korea

The current labor migration system is characterized by its duality, where entry routes leading to employment are divided into employment in either low-skilled or high-skilled jobs. Each path is distinctly characterized by eligibility requirements as well as corresponding restrictions and benefits owing to the respective entry status, as set down in the law. The latter includes scope of permitted activities, length of stay, whether family members can be accompanied and are permitted to seek employment as well and whether the path may eventually lead to permanent residency. Strategies to attract skilled foreign workers have been insufficient in the past, as reviewed below. Low-skilled workers essentially consist of two groups: one that enters through the Employment Permit System(EPS) with an E-9 visa(for "non-professional employment"), and another that is comprised of overseas Koreans and is issued an H-2 visa(for "working visits"). The two systems are formally governed by the same law but differ substantially in terms of eligibility, admission process, activities permitted and length of stay as the programs have evolved somewhat separately against different backgrounds.

A. Policies for high-skilled foreign workers

While there is no universally accepted definition for the term 'highly skilled workers', it usually refers to individuals with a broad range of educational and occupational backgrounds such as researchers, scientists, IT specialists and lawyers. Professional workers are in practice given work permission provided they have an employment contract with a domestic employer. They are also exempt from labor market tests that require the employer to prove that no other suitable domestic worker was available to accept the position. Workers under professional employment categories enjoy varying extents of favorable treatment regarding mainly their terms of stay and the possibility for permanent residency.

The following visa types are in practice considered to fall under professional employment: E-1(Professor), E-2(Foreign language instructor), E-3(Research), E-4(Technological Transfer), E-5(Professional Employment), E-6(Arts and Performances) and E-7(Specially designated activities)[22]. Visas can be received once eligibility requirements are fulfilled and an employment contract obtained. Table 4 shows the number of professional visa holders by visa type, for 2004-2011. Despite efforts, the overall number of skilled foreign workers remains very low, with their share out of the foreign population being persistently below 5%. Moreover, foreign language instructors(mostly English language teachers) holding E-2 visas have consistently accounted for around half of all professional visa holders. The number of E-7 visa holders has seen a steep increase over the time period given(and a striking 60% increase between 2009-2011), which is likely attributable to the fact that the law stipulates that the visa is issued to "persons...that engage in activities specially designated by the Minister of Justice" and thus includes a variety of workers ranging from welders to livestock farmers and entertainment workers(Cho *et al*., 2009).

The Science Card and Gold Card programs are examples of recent efforts to attract global talents in the fields of science and technology. Persons with a master's degree in science and engineering with at least 3 years of experience(Science card) or persons with a master's degree(or a comparable combination of education and experience) in advanced technology(Gold card) were targeted. Workers from mainly developing countries such as India, Vietnam and China entered through this program. In order to obtain a visa, workers need to present proof of education and an employment contract. Those who are granted a Gold card are issued an E-7 visa and are entitled to benefits such as extended term of stay, multiple-entry visa, the right to apply for permanent residency after 3 years and work authorization for accompanying spouses.

[22] The E-5 visa is issued to lawyers, certified public accountants, medical doctors and other professionally qualified individuals with public certification.

Individuals holding a Science card are issued either an E-1 or E-3 visa, and are entitled to similar benefits. However, utilization of these programs has been very low overall, highlighting the need for policies to better attract highly skilled workers especially in the midst of worldwide global competition for talent.[23]

Table 3. Number of professionals and investors by visa category.

	Professorship	Foreign Language Instructor	Research	Technology Transfer	Special Profession	Arts and Performances	Specially Designated Activities
Year	E-1	E-2	E-3	E-4	E-5	E-6	E-7
2004	955	11,296	1,601	191	298	3,813	3,575
2005	1,094	12,439	1,765	199	303	4,452	4,533
2006	1,159	15,001	2,095	166	351	4,510	5,729
2007	1,279	17,721	2,318	174	414	4,421	7,175
2008	1,589	19,771	2,057	121	530	4,831	8,405
2009	2,056	22,642	2,066	197	536	4,305	8,896
2010	2,266	23,317	2,324	233	594	4,162	10,712
2011	2,474	22,541	2,606	202	629	4,246	14,397

Source: Statistical Yearbook on arrivals, departures and immigration policies, Korea Immigration Service, Ministry of Justice, various years.

B. Brief history of admission schemes for low-skilled foreign workers

Korea has achieved rapid and enormous transformation from a traditional agricultural economy to a prosperous industrialized economy over the past five decades. Once a major labor-exporting country, growing labor shortages in small- and medium-sized enterprises(SMEs) starting in the late 1980s led employers to demand the introduction of foreign workers. However, because of strong opposition from labor unions who feared potential job losses of domestic workers, the government first tried to settle labor shortages with the 'Industrial Trainee Program

[23] Between 2001 and October 2012, a total of 1614 persons received the Science Card(www.scard.go.kr).

for Firms Investing Overseas' in 1991. The aim of this program was to train local workers employed by Korean firms stationed overseas, thereby lifting labor shortage during the training period and at the same time facilitating technology transfer to developing countries. Trainees could stay up to 6 months, with a possible extension of 6 months. As only firms investing overseas were eligible, benefits accrued to large firms only and labor shortages in SMEs deteriorated. The government launched the Industrial Trainee System in 1993, which expanded the program in scale and coverage. A major change from the previous scheme was that the process involving the recruitment, matching, training and management of industrial trainees was delegated to the private Federation of Small and Medium Businesses. While in effect, this scheme faced strong criticism for its high incidence of illegal workers and corrupt practices in selection procedures. Moreover, trainees were not covered by labor relations regulations because of their formal status as trainees(and not workers), exposing them to long working hours, substandard wages and abuse. The legal framework for the protection of trainees was weak and a growing number of trainees broke away from their contracted establishment and sought illegal employment, partly to recoup the high costs they had to incur during the admission process. These trainees kept providing cheap labor in mainly 3D industries and neither a crackdown on illegal workers nor financial incentives by the government to hire domestic workers instead was successful after the onset of the financial crisis in 1997(Yoo *et al*., 2004).

The industry maintained strong opposition to attempts by the government to introduce an employment permit system, out of concern that access to foreign labor could become more difficult. As an interim scheme, the government implemented the Training-for-employment program in 2000, which let trainees obtain a one-year employment permit after completing 2 years of training(subsequently changed to allow two years of employment following one year of training). Despite efforts, however, issues of abuse and exploitation went largely unsolved. By January 2003, the share of industrial trainees that had overstayed their visa had soared to 79.1%(Lee *et al.*, 2007). It was against this background, that the government gathered public consensus and finally launched the Employment Permit System(EPS) in 2004[24]. The introduction of the EPS marked a landmark change in the Korean history of foreign worker policy, as it was the first official provision on the employment of foreign workers in Korea.

The EPS is essentially a demand-driven admission system: employers who demonstrate that they are not able to fill open positions with native workers can request permission to hire foreign workers. The EPS has shown improvement over previous schemes in several aspects. First, the selection and admission process became transparent as the public sector took charge by signing bilateral labor agreements(MOUs) with sending countries.[25] Second, prohibition against discriminatory treatment based on nationality was formally laid down in the law, protecting against violation of labor rights and human rights in general. Third, incentives to stay and work illegally were curbed and thus law and order reestablished.

Labor migration schemes for overseas Koreans(most of whom are from China) have evolved somewhat separately. Shortly after the Training-for-employment program was started, the Employment Regulation Program(ERP) was introduced in 2002, which allowed ethnic Koreans of age 40 and over(subsequently extended to the age 25 and over) with family or close relatives in Korea to enter and work in certain sectors of the services industry. Eligibility for this program was extended in 2007 to ethnic Koreans without family ties with the introduction of the Working Visit Program(WVP), which permits ethnic Koreans of age 25 and over from mainly China and countries of the former Soviet Union to receive multiple-entry work visas that are valid for 5

[24] The Industrial Trainee System was integrated into the Employment Permit System in 2007.
[25] Currently, 15 countries have signed such bilateral agreements with Korea.

years. Workers are allowed to enter the country without a job offer and, on completion of mandatory occupational training sessions, they can freely search for low-skilled work in certain industries as prescribed in the 'Departures and Arrivals Control Act'. The list of such industries has been expanded over time and as of 2012, includes manufacturing, construction, agriculture and livestock, aquaculture and coastal fishing, and 25 sectors in the services industry. Unlike E-9 visa holders, ethnic Koreans are allowed to work in a large number of service sectors. Employers need to apply for a certification that allows them to employ these special work permit holders, who may change employers without authorization. Since 2010, no additional quota has been allocated to overseas Koreans entering under the working visit system and their flow is regulated by holding the total number staying in the country constant and not to exceed 303,000. This implies in practice that only when the number of H-2 visa holders currently staying in Korea falls below this limit, additional people are admitted.[26]

The number of foreign workers who entered Korea either on the non-professional visa (E-9) or the working visit visa (H-2) under the EPS can be seen in Table 1.[27] The total number of foreign workers entering Korea through the system was approximately 113,000 in 2005, a year after the introduction of the EPS, after which it increased rapidly to reach almost 538,000 in 2011. Broken down into E-9 and H-2 visa holders, the former was greater in number than the latter in the early years of the EPS, which quickly changed with the launch of the Working Visit Program (WVP) in 2007. As of end-2011, 56.4% of all foreign workers in the EPS are H-2 visa holders and the rest E-9 visa holders.

[26] This quota only applies to ethnic Koreans without family ties. Those with family or close relatives are not bound by it.
[27] Beginning from 2007, H-2 visa holders represent those entering Korea through the Working Visit Program (WVP).

Controversies have recently arisen over ethnic Koreans, against claims that they take away jobs from native Koreans, particularly in construction and certain services sectors. As seen in Table 1, over half of less-skilled foreign workers consist of H-2 visa holders and unlike nonethnic foreign workers who mainly work in the manufacturing industry, ethnic Koreans mainly work in the services and construction industries. Because of concerns that domestic workers are crowded out by foreign workers in the construction industry, it was decided that a predetermined number of H-2 holders and only those who had completed mandatory training sessions before March 2009 were allowed to work in construction. This effectively cut off additional inflows of ethnic Koreans into that industry.

Although it seems very likely that there are inevitable labor market impacts from the inflow of ethnic Koreans, policy-setting(in particular that related to labor market issues) concerning ethnic Koreans is not straightforward. There are two potentially conflicting approaches in consideration: a labor market approach that aims at easing labor shortage in low-skilled occupations, and a beneficiary approach that aims at providing economic assistance to overseas Koreans, who had been forcibly deported to China and countries of the former Soviet Union.[28] Finding a balance between these two approaches, meeting labor market needs without harming the job prospects of native workers, formation of a migrant labor policy that takes account of a need for labor with varying skill levels and other imminent issues are discussed in the last section.

[28] The 'Act on the departure, arrival and legal status of overseas Koreans' when it was first enacted in 1999 initially covered only individuals who emigrated after the Republic of Korea was established in 1945, effectively covering overseas Koreans residing mostly in the US and Japan. A constitutional appeal eventually led to amendment of the law in 2003 to include ethnic Koreans who had migrated before 1945.

III. The Employment Permit System

A. Admission process

The Foreign Workforce Policy Committee is a statutory organization that is affiliated with the prime minister's office, which reviews and makes decisions on policies concerning foreign workers.[29] The most important task of the Committee is to decide on the total annual quota and how to allocate the quota among industries. By law, the Foreign Workforce Policy Committee(FWPC) announces the annual foreign worker quota each year.[30] As seen in Table 4, the quota is divided by industry and between E-9 and H-2 visa holders. The number of foreign workers admitted steadily increased until the financial crisis hit, dropped in 2009 to about a quarter of the level from the previous year, but has been rising again in recent years. There also exists a dependency ceiling which differs by industry and firm size, and in addition, firms in industries which have a labor shortage rate that is above that of small-and medium-sized[31] manufacturing firms are given a 20% lift each year. The quota is known to be a function of labor shortage rates, calculated based on results from the Occupational Labor Force Survey at Establishments, and replacement demand due to foreign workers leaving because their term is due, then adjusted to account for changes in demand in case of business cycle downturns and projections on how many positions are expected to be filled by domestic workers(Cho *et al.*, 2009).

Table 4 shows the annual foreign worker quota by industry, for 2004-2013. Total admissions peaked in 2008 at 132,000 after which there was a sharp drop due to the onset of the financial crisis in 2009. Around the same time, the FWPC decided to cap the maximum number of ethnic

[29] The committee's mandate is governed by Section 4 of the 'Act on the employment, etc of foreign workers'.
[30] The quota only applies to low-skilled workers.
[31] Firms with 300 employees and less

Koreans at 303,000 in order to control any further inflow.[32] Consequently, the supply of additional foreign workers in the services industry went down to almost zero as E-9 visa holders are not allowed to seek work in that industry to begin with. However, the quota has been rising again after 2010 as it was believed that the economy was recovering from the crisis faster than expected and as employers kept requesting more foreign workers.

The following describes the general procedure of hiring a foreign worker. Firms that wish to hire foreign workers have to pass a so-called labor market test in order to prove that no other domestic worker was qualified and willing to accept the available position. Specifically, firms are required to advertise the position for 14 days and if unsuccessful, receive a "confirmation of labor shortage" which is valid for 3 months. Employers then receive permission to employ foreign workers. The counterpart agency in sending countries selects workers based on information such as Korean language test scores, results from a skill level test and experience and sends the list to public employment support centers(affiliated under the Ministry of Employment and Labor) in Korea. These in turn recommend a few off the list that match the requirements set forth by the potential employer, who is then given information on age, nationality, education, experience and health status of short-listed candidates. Once a match occurs, employment contracts that specify terms of employment including wages, work hours, length of employment and workplace, are signed. This can be done either directly, or through delegation by Human Resources Development Service of Korea(HRDS). In principle, these workers are not permitted to switch employers unless 1) the employer terminates the contract or declines to extend it or 2) the firm shuts down its operations or the worker is unable to continue work due to reasons that are not the worker's liability(e.g., violation of labor code). The

[32] As a result, the quota for H-2 visas has been virtually zero since 2010, regardless of industry.

difference between E-9 and H-2 visa holders is that the latter, on issuance of the visa, are permitted to enter the country first and then search freely for employment. Moreover, H-2 visa holders have far fewer restrictions with regard to industries where they may work in and whether the person can change employers without authorization.

Table 4. Annual foreign worker quota, total and by industry. EPS-G(eneral) and EPS-S(pecial) each indicate the category of workers entering with the non-professional visa(E-9) and the Working visit visa(H-2, previously F-1-4 visa for ERP participants) visa. The re-entry quota applies to those who have maxed out their employment period of 4 years and 10 months, but are allowed to re-enter under certain conditions as described in "B. Legal status and rights".

Year	Category	Quota	Manufacturing	Construction	Services	Agriculture & Livestock	Fishing
2013	EPS-G	52,000	42,600	1,560	90	5,600	2,150
	EPS-S	0	0	0	0	0	0
	Re-entry	10,000	9,400	40	10	400	150
	Total	62,000	52,000	1,600	100	6,000	2,300
2012	EPS-G	46,000	39,100	1,300	130	3,850	1,620
	EPS-S	0	0	0	0	0	0
	Re-entry	11,000	9,900	300	20	650	130
	Total	57,000	49,000	1,600	150	4,500	1,750
2011	EPS-G	48,000	40,000	1,600	150	4,500	1,750
	EPS-S	0	0	0	0	0	0
	Total	48,000	40,000	1,600	150	4,500	1,750
2010	EPS-G	34,000	28,100	1,600	100	3,100	1,100
	EPS-S	0	0	0	0	0	0
	Total	34,000	28,100	1,600	100	3,100	1,100
2009	EPS-G	17,000	13,000	2,000	100	1,000	900
	EPS-S	17,000	10,000	0	5,900	1,000	100
	Total	34,000	23,000	2,000	6,000	2,000	1,000
2008	EPS-G	72,000	60,800	6,000	400	4,000	800
	EPS-S	60,000	16,000	12,000	30,600	1,000	400
	Total	132,000	76,800	18,000	31,000	5,000	1,200
2007	EPS-G	49,600	42,100	4,400	200	1,900	1,000
	EPS-S	60,000	27,200	10,500	20,400	1,700	200
	Total	109,600	69,300	14,900	20,600	3,600	1,200
2006	EPS-G	34,750	30,600	100	250	1,500	2,300
	EPS-S	38,050	13,100	5,600	18,650	500	200

	Total	72,800	43,700	5,700	18,900	2,000	2,500
2005	EPS-G	14,300	12,000	1,000	300	1,000	-
	EPS-S	3,700	-	2,000	1,700	-	-
	Total	18,000	12,000	3,000	1,700	1,000	
2004	EPS-G	25,000	17,000	6,000	0	2,000	-
	EPS-S	16,000	-	12,000	4,000	-	-
	Total	41,000	17,000	18,000	4,000	2,000	-

Source: Announcements by the Foreign Workforce Policy Committee, various years.

B. Legal status and rights

The length of an employment contract is not to exceed 3 years, with a possible one-time extension of no more than 2 years.[33] However, regulations on maximum term of stay for low-skilled foreign workers have been continuously revised, including in 2011 when "hard-working workers" were allowed to re-enter the country after 3 months and become re-employed, under the condition of departure at the time of visa expiration. Alternatively, workers that pass the Special Korean Language Test may re-enter for employment after 6 months, on the condition that they voluntarily leave the country before their first employment term of 4 years and 10 months expires. In the very foreseeable future, these workers could end up having legally worked in Korea for almost 10 years.[34]

Family members are not allowed to accompany foreign workers in the low-skilled category. Only few exceptions exist: for example, an H-2 visa holder may invite up to two close family members after working for the same employer for at least 2 years.[35] There is in principle no path

[33] Section 18 of 'the Act on the Employment, etc of Foreign Workers'.
[34] "Hard-working workers" refers to those who, at the time of visa expiration, have worked for their current employer for at least one year.
[35] Employment must have been in manufacturing, agriculture and livestock or fishing.

to permanent residency for E-9 visa holders since their maximum length of stay is capped at 4 years and 10 months.[36]

Workers entering through the EPS are covered by the Labor Standards Act, the minimum wage law and Occupational Safety and Health Act under the labor relations law.[37] The 'Act on the Employment, etc of Foreign Workers' specifies that foreign workers should be covered by the following insurances:

Departure guarantee insurance, which is paid by the employer and is intended to smooth out separation payment and to ensure timely departure of foreign workers when the contract is terminated, ② National health insurance ③ Return cost insurance, which is paid by the worker and intends to induce foreign workers to return home and discourage them from overstaying their visas. In addition, the worker is protected against non-payment of wages through the wage payment guarantee insurance and covered by accidence insurance. Finally, coverage by the national pension program follows a principle of reciprocity and thus depends on the nationality of the worker.

IV. Employment Structure of Foreign Workers and Impacts on Labor Market

1. Employment structure of foreign workers

[36] This essentially prevents them from fulfilling one of the requirements for permanent residency, which is that the person must have stayed in the country for a continuous five years('Nationality Act').

[37] Home based businesses and home care workers, both domestic and foreign, are exempt. In addition, workers in the agriculture, livestock and fishing industries are not covered by the Labor Standards Act which regulates work hours, breaks and vacation(Choi, 2010).

Currently, there are no available nationwide survey statistics on actual economic activity conditions of foreign workers.[38] Since this makes it difficult to estimate the distribution status of industries or occupations that foreign workers are engaged in, this study uses the central government's administrative statistics or data from surveys implemented so far to look into the employment structure of foreign workers who have entered Korea through the Employment Permit System (EPS). The following section first examines the overall scale of the foreign workforce population.

Employers need to gain approval from the Ministry of Employment and Labor to hire foreign workers entering through the EPS.[39] Thus, it is possible to look into the distribution of the foreign workforce population by industry type and establishment size using data on establishments that filed for application to hire a foreign worker.[40] Table 5 shows the industry distribution of foreign workers based on administrative data from the EPS, which is collected at the end of March each year. As of 2011, the manufacturing industry has the largest share with 77.2% of all E-9 (non-professional visa) holders staying in Korea, followed by the service industry(14.1%). Of all E-9 visa holders, 91.1% are working in manufacturing, 5.9% in agriculture and livestock and 2.4% in construction. As for H-2 visa holders, the percentage of non-reported employment is too high to examine their industry distribution, but it is known from other surveys that they usually work in manufacturing, construction, accommodation and food services and domestic household and nursing services.

[38] A nationwide survey of the actual economic activity conditions of foreign workers was conducted by Statistics Korea for the first time in 2012, but the statistics have not yet been released as of October.

[39] In order to obtain approval, the firm's industry has to be on the list of eligible industries and the employer has to prove that efforts to hire a domestic worker were unsuccessful.

[40] The data are based on reports alone, and hence many foreign workers on the WVP (whose reporting rate is low) are missing.

Table 5. Number of Foreign Workers by Industry Type, 2004～2011: as of March each year(Unit: Number of Persons)

		2004	2005	2006	2007	2008	2009	2010	2011
E-9 Holders	Manufacturing	12	6,431	43,944	56,669	82,934	109,591	129,946	147,693
	Construction	-	-	-	6	410	1,083	2,333	3,602
	Agriculture and Livestock	-	-	18	54	2,357	4,910	5,265	8,677
	Services	-	2	71	85	101	123	112	156
	Fishing	-	-	-	1	379	711	1,163	1,899
	Total	12	6,433	44,033	56,815	86,181	116,418	138,819	162,027
H-2 Holders	Manufacturing	-	2	1,643	9,033	19,040	24,134	35,982	41,879
	Construction	-			45	1,063	3,163	10,203	5,452
	Agriculture and Livestock	-		3	99	415	822	1,274	1,474
	Services	-	2,156	13,958	24,015	23,040	23,982	35,276	34,585
	Fishing	-			4	52	97	204	225
	Total	-	2,158	15,604	33,196	43,610	52,198	82,939	83,615
Industrial trainees	Manufacturing	1	57	709	53,709	45,520	20,610	1,425	819
	Construction	-	-	-	156	352	595	241	180
	Agriculture and Livestock	-	-	-	1	149	83	6	2
	Services	-	-	-	21	12	3	-	-
	Fishing	-	-	-	-	54	141	9	6
	Total	1	57	709	53,887	46,087	21,432	1,681	1,007
Total	Manufacturing	13	6,490	46,296	119,411	147,494	154,335	167,353	190,391
	Construction	-	-	-	207	1,825	4,841	12,777	9,234
	Agriculture and Livestock	-	-	21	154	2,921	5,815	6,545	10,153
	Services	-	2,158	14,029	24,121	23,153	24,108	35,388	34,741
	Fishing	-	-	-	5	485	949	1,376	2,130
	Total	13	8,648	60,346	143,898	175,878	190,048	223,439	246,649

Note: 1) The year is based on the start date on the employment contract.

Source: Administrative data on EPS, Ministry of Employment and Labor

Table 6. Distribution of Foreign Workers by Establishment Size (as of end-May 2012)

(Unit: Number of Persons)

Establishment Size (Number of Employees)	4 or less	Between5 and 10	Between 11 and 30	Between 31 and 50	Between 51 and 100	Between 101 and 200	Between 201 and 300	Between 301 and 500	501 or more	Total
Total	40,821	17,002	16,964	4,798	2,915	1,361	295	97	35	84,288
Number of Establishments Adopting EPS	11,672	10,197	9,737	2,491	1,474	744	180	57	17	36,569
Number of Establishments Adopting Both EPS and WVP	399	1,646	3,294	1,436	913	409	80	24	5	8,206
Number of Establishments Adopting WVP	28,750	5,159	3,933	871	528	208	35	16	13	39,513

Note: These figures are based on firms that reported their status, and the number of firms adopting the Working Visit Program (WVP) is estimated to be much higher.
Source: Ministry of Employment and Labor

Table 7 shows the distribution of foreign workers entering Korea through the EPS by establishment size and visa type. Of all entrants, 35.8% are working in workplaces with 10 or less employees and 67.1% in workplaces with 30 or less employees. The corresponding numbers for E-9 visa holders are 31.1% and 64.6%, respectively.

Table 7. Distribution of Foreign Workers by Establishment Size and Visa Type (as of end-May 2012)

(Unit: Number of Persons)

Firm Size (Number of Employees)	4 or less	Between 5 and 10	Between 11 and 30	Between 31 and 50	Between 51 and 100	Between 101 and 200	Between 201 and 300	Between 301 and 500	501 or More	Total
Total	40,200	46,619	75,898	33,488	25,176	15,286	4,164	1,334	307	242,472
E-9 visa	19,236	36,405	59,876	26,042	19,868	12,607	3,502	1,094	229	178,859
H-2 visa	20,964	10,214	16,022	7,446	5,308	2,679	662	240	78	63,613

Note: These figures are based on firms that report their status. The number of firms participating in the Working Visit Program (WVP) is estimated to be much higher.

Source: Ministry of Employment and Labor

As illustrated above, the size of the low-skilled foreign workforce is showing a continued increase in Korea. This indicates that the domestic demand for the foreign workforce is on the rise largely due to difficulties in finding a sufficient number of domestic workers to match their needs. Table 8 demonstrates results from a survey conducted on establishments currently employing foreigners, asking about their preferred recruitment. Of all respondents, 56.7% chose domestic workers and 36.9% chose foreign workers, implying that even among industries already hiring foreign workers, the demand for domestic workers is high. Meanwhile, in response to the question as to which one is more readily available for employment, 49.4% answered foreign workforce, followed by 24.2% for domestic workforce(Table 8), implying that most firms prefer domestic workers, but in reality, it is not easy to meet this demand.

Table 8. Preferred Workforce by Industry and Establishment Size

		Number of Cases	**Most Preferred Workforce_1st choice**							
			Domestic Workforce		**Ethnic Koreans (mostly Korean-Chinese)**		**Foreign Workforce**		**Unanswered**	
			Number of Persons	**%**	**Number of Persons**	**%**	**Number of Persons**	**%**	**Number of Persons**	**%**
[Total]		360	204	56.7	8	2.2	133	36.9	15	4.2
Industry	Manufacturing	151	118	78.1	1	0.7	25	16.6	7	4.6
	Construction	37	17	45.9	0	0.0	20	54.1	0	0.0
	Agriculture, Livestock and Fishing	172	69	40.1	7	4.1	88	51.2	8	4.7
Establishment Size	Less than 10 Employees	193	86	44.6	7	3.6	90	46.6	10	5.2
	Between 10 and 29 Employees	79	57	72.2	0	0.0	19	24.1	3	3.8

	Between 30 and 99 Employees	48	35	72.9	0	0.0	11	22.9	2	4.2
	100 or more Employees	31	22	71.0	0	0.0	9	29.0	0	0.0
	Unanswered	9	4	44.4	1	11.1	4	44.4	0	0.0

Source: Foreign Worker Employment Survey (July 2012)_Workplace Survey. Recited from Kyu-Yong Lee (2012)

Table 9. Workforce Availability by Industry and Establishment Size

		Number of Cases	Most Available Workforce for Employment_1st rank							
			Domestic Workforce		Ethnic Koreans (mostly Korean-Chinese)		Foreign Workforce		Unanswered	
			Number of Persons	%	Number of Persons	%	Number of Persons	%	Number of Persons	%
[Total]		360	87	24.2	64	17.8	178	49.4	31	8.6
Industry	Manufacturing	151	37	24.5	29	19.2	75	49.7	10	6.6
	Construction	37	15	40.5	13	35.1	8	21.6	1	2.7
	Agriculture, Livestock and Fishing	172	35	20.3	22	12.8	95	55.2	20	11.6
Establishment Size	Less than 10 Employees	193	35	18.1	33	17.1	102	52.8	23	11.9
	10~29 Employees	79	17	21.5	14	17.7	45	57.0	3	3.8
	30~99 Employees	48	18	37.5	9	18.8	17	35.4	4	8.3
	100 and more Employees	31	14	45.2	8	25.8	9	29.0	0	0.0
	No answer	9	3	33.3	0	0.0	5	55.6	1	11.1

Source: Foreign Worker Employment Survey (Jul. 2012)_Workplace Survey. Recited from Kyu-Yong Lee (2012)

2. Wages and working conditions of foreign workers

A. Wages and work hours

Foreign workers staying in Korea are subject to the Labor Standards Act, and thus their wage level is subject to a minimum wage. Given that in Korea, the minimum wage is based on prevailing wages, the actual wage paid to foreign workers is usually above the minimum wage level.

Wages and working conditions of foreign workers are examined using data from a survey by the Ministry of Employment and Labor in 2011. An upside of this survey is that since estimates are based on workplaces that are reported to the ministry to be hiring foreign workers under the EPS, they are representative of the population of E-9 visa holders. On the other hand, the data on H-2 visa holders may not be representative of its population, given the low share of reporting workplaces. Table 10 below compares itemized wages by nationality and sex of workers. The wage of domestic workers is based on that of those performing similar work as foreign workers in the same workplace. By nationality, foreign workers are paid 1,616,000 won per month, about 81.4% of that of domestic workers (1,983,000 won). By sex, the wage of foreign male workers is 78.4% of that of domestic male workers, while that of foreign female workers is 89.8% of that of domestic female workers. Then, by visa type, the wage of E-9 visa holders is 1,638,000 won, slightly higher than that of H-2 visa holders(1,565,000 won).

Table 10. Wage Level (2011)

(Unit: Number of Persons, 1,000 won)

		Monthly Wage	Regular Wage	Regular Wage per Hour(won)
National	Domestic Worker	1,983	1,648	10.628
	Foreign Worker	1,616	1,263	7.322
National, Gender	Domestic Male Worker	2,127	1,765	11.580
	Domestic Female Worker	1,589	1,328	8.007
	Foreign Male Worker	1,667	1,264	7.759
	Foreign Female Worker	1,427	1,261	5.708
Visa Type	Domestic Worker	1,983	1,648	10.628

Non-professional Visa (E-9)	1,638	1,228	7.690
Working Visit Visa (H-2)	1,565	1,342	6.527
Ethnic Koreans (F-4)	1,655	1,372	6.664
Others	1,442	1,242	6.418

Table 11 shows the wages of foreign workers by industry. The highest wages(1,732,000 won) are earned in construction, followed in descending order by manufacturing(1,679,000 won), services(1,392,000 won), agriculture and livestock(1,233,000 won) and fishing(1,195,000 won). It is also found that since the government began to grant an overseas Korean status (F-4) or permanent resident status (F-5) to H-2 visa holders employed in agriculture and livestock or fishing industries or local manufacturing firms, the wage level of H-2 visa holders exhibits variation.

Table 11. Wages of Foreign Workers by Industry

(Unit: 1,000 won)

	Monthly Wage	Regular Wage	**Regular Wage per Hour**
Total	1,616	1,263	7.322
Agriculture and Livestock	1,233	1,168	8.139
Fishing	1,195	1,194	14.324
Manufacturing	1,679	1,240	7.254
Construction	1,732	1,470	9.192
Services	1,392	1,359	6.170
Food services	1,381	1,349	7.446
Other services	1,520	1,409	6.935
Private nursing	1,428	1,427	3.197
Employment in Private Households	1,352	1,341	3.223

Among the foreign workforce, female workers are found to work for much longer hours (294.4 hours) than male workers (238.8 hours). On the other hand, as for domestic workers, male workers work for 218.8 hours, while female workers work for 215.5 hours.

By industry, foreign workers in the service industry work the longest hours, which reflects the fact that workers employed in private nursing and private households spend most of their day working. Agriculture and livestock comes next with 252.5 working hours per month, followed by manufacturing (247.5 hours), construction (217.8 hours), and fishing (186.4 hours), all of which are much longer than the working hours of domestic workers in the same industry. By establishment size, foreign workers in small firms with 1~4 employees top the list with 296.4 hours per month.

Table 12. Average Work Hours per Month

		Total Work Hours	Overtime Work Hours
National, Gender	Domestic Male Worker	218.8	34.2
	Domestic Female Worker	215.8	29.8
	Foreign Male Worker	238.8	46.2
	Foreign Female Worker	294.4	20.4
Industry	Agriculture and Livestock	252.5	10.8
	Fishing	186.4	0.8
	Manufacturing	239.9	50.1
	Construction	217.8	30.4
	Services	328.0	5.9
Establishment Size	1~4 Employees	296.4	8.6
	5～9 Employees	228.5	24.6
	10～29 Employees	239.5	47.6
	30～99 Employees	242.8	59.7
	100～299 Employees	257.2	67.7
	300 or More Employees	249.6	82.3

Table 13 shows trends in wages of low-skilled foreign workers found in surveys from 2003 to 2011. Data for 2003 is from a survey on industrial trainees, while others (2005 and onwards) are from surveys on foreign workers under the EPS. Depending on the surveyor and survey period, the wage gap by visa type varies each year. The ratio of the average monthly wage to the minimum wage was examined to evaluate the wage level and it turned out that the wage level of foreign workers has increased at a rate slightly higher than the minimum wage.

Table 13. Changes in Wages of Foreign Workers (2003～2011)

(Unit: 10,000 won)

		Average Monthly Wage	Minimum Wage Level (Monthly)
2005		100.3	64.8(209 work hours)
2007		114.4	72.7(209 work hours)
2008	E-9 holders	114.4	78.8(209 work hours)
	H-2 holders	147.5	
2009	Male	140.4	83.6(209 work hours)
	Female	126.6	
2011	Male	166.7	90.3
	Female	142.7	
	E-9 holders	163.8	
	H-2 holders	156.5	

Source: Data until 2009 are recited from Kyu-Yong Lee *et al*., (2011), and the data for 2011 are from the survey by the Ministry of Employment and Labor.

Table 14 displays the collective results from various surveys that asked employers on work hours, workload, productivity, wages and aggregate labor costs of foreign workers, holding that of domestic workers engaged in the same occupation constant at 100. As seen in the table, wages and aggregate labor costs of foreign workers turn out lower than employment costs of domestic workers. Comparing this with productivity, aggregate labor cost turns out higher.

Table 14. Productivity-Wage-Labor Cost of Foreign Workers Relative to Domestic Workers (2003～2012)

(Unit: %)

	Work Hours	Workload	Productivity	Wages	Aggregate Labor Costs
2003 Survey	106.3	-	87.4	71.4	86.1
2005 Survey	100.8	88.3	84.2	85.1	-
2007 Survey	101.5	94.7	89.0	86.7	90.1
2012 Survey	100.2	91.7	85.0	82.7	90.1

Note: Productivity, wages and labor costs of foreign workers holding that of domestic workers constant at 100.

Source: Data is based on surveys from each year (cited from Kyu-Yong Lee *et al*., 2011), and data from 2012 are cited from Kyu-Yong Lee (2012).

B. Social insurances, housing and remittance

Table 15 shows social insurance coverage and fringe benefits provision for foreign workers under the EPS according to the 2011 survey by Ministry of Employment and Labor. Looking at the overall social insurance coverage of foreign workers, 44.1% are covered by employment insurance, 87.5% by health insurance, 63.9% by the national pension program and 88.3% by workers' compensation insurance. Coverage is highest for workers' compensation insurance and lowest for employment insurance, which is due to the fact that participation in the latter is not mandatory. By industry, the social insurance coverage rate is highest in manufacturing, and lowest in private nursing and employment in private households.

Among foreign workers surveyed, 45.5% receive bonuses and 76.2% are entitled to severance pay.

Table 15. Social Insurance Coverage Rates and Fringe Benefits Provision for Foreign Workers by Industry

(Unit: %)

	Employment Insurance	Health Insurance	National Pension	Worker's Compensation Insurance	Bonus	Severance Pay
Total	44.1	87.5	63.9	88.3	45.5	76.2
Agriculture and Livestock	28.5	50.3	26.6	48.6	28.3	50.2
Fishing	46.6	44.4	31.5	70.0	21.8	47.7
Manufacturing	43.1	97.9	71.8	94.8	51.7	87.7
Construction	53.3	76.5	42.5	90.0	15.8	44.4
Food Service	63.2	60.7	54.7	67.3	39.2	45.6
Other services	60.7	83.1	74.2	80.8	52.6	54.6
Private Nursing	24.6	4.8	0.8	41.3	6.4	4.8
Employment in Private Households	24.8	15.8	9.1	60.7	0.0	3.4

Source: Survey on Foreign Workforce Employment, Ministry of Employment and Labor (2011)

Foreign workers' type of housing includes group residential facilities such as dormitories (56.5%), single-family homes (9.3%), apartments (5.3%), row houses/multi-family houses (8.1%), studios (7.9%), temporary buildings (6.9%) and housing within a non-residential building (3.1%), along with unanswered (2.9%). By visa type, 69.4% of E-9 visa holders live in group residential facilities such as dormitories, 7.9% in temporary buildings, 6.3% in studios, 4.2% in single-family homes, 4.0% in row houses/multi-family houses, 3.4% in apartments, and 2.4% within a non-residential building. Meanwhile, 25.2% of H-2 visa holders live in group residential facilities such as dormitories, 24.8% in single family homes, 9.2% in apartments, 16.6% in row houses/multi-family houses, 11.9% in studios, 4.2% within non-residential buildings and 3.0% in temporary buildings.

Table 16. Foreign Workers' Type of Residence

(Unit: Number of Persons, %)

		Group Residential Facility: Dormitory, etc.	Single Family Home	Apartment	Row House, Multi-family House	Studio	Temporary Building	Within Non-residential Building	Unanswered
Total		56.5	9.3	5.3	8.1	7.9	6.9	3.1	2.9
Gender	Male	63.7	5.0	3.4	7.0	7.7	7.6	2.8	2.8
	Female	29.1	25.2	12.7	12.5	8.6	4.2	4.5	3.2
Visa Type	Non-professional Visa (E-9)	69.4	4.2	3.4	4.0	6.3	7.9	2.4	2.5
	Working Visit Visa (H-2)	25.2	24.8	9.2	16.6	11.9	3.0	4.2	5.1

Source: Survey on Foreign Workforce Employment, Ministry of Employment and Labor (2011)

Table 17 shows monthly remittance amounts by foreign workers based on a survey conducted by the Ministry of Employment and Labor in 2011. The distribution of monthly remittances turned out to be 0 won (18.6%), 10,000~490,000 won (4.0%), 500,000~990,000 won (23.2%), 1,000,000~1,490,000 won(25.5%), 1,500,000~1,990,000 won (2.5%), 2,000,000~2,490,000 won (0.4%), 2,500,000~2,990,000 won (0.1%) and 3,000,000 won or more (0.5%). The distribution for E-9 visa holders was 0 won (11.2%), 10,000~490,000 won (2.9%), 500,000~990,000 won (25.1%), 1,000,000~1,490,000 won (30.0%), 1,500,000~1,990,000 won (3.0%), 2,000,000~2,490,000 won (0.6%), 2,500,000~2,990,000 won (0.1%) and 3,000,000 won or more (0.6%). According to this table, E-9 visa holders appear to remit more money than H-2 visa holders, which can also be confirmed by the percentage of remittance against monthly wage of foreign workers shown in Table 18. E-9 visa holders remit a decidedly large share (54.7%) of their wages.

Table 17. Monthly Remittance by Foreign Workers

(Unit: %, 10,000 won)

		0	1～ 49	50～ 99	100～ 149	150～ 199	200～ 249	250～ 299	300 or More	Unanswered	Total	Average
Total		18.6	4.0	23.2	25.5	2.5	.4	.1	.5	25.2	100.0	76.6
Gender	Male	13.7	2.7	22.9	28.7	2.9	.5	.1	.6	27.9	100.0	86.0
	Female	36.8	9.0	24.6	13.5	.7	.1	0.0	.2	15.1	100.0	46.8
Visa Type	Non-professional Visa (E-9)	11.2	2.9	25.1	30.0	3.0	.6	.1	.6	26.5	100.0	89.6
	Working Visit Visa (H-2)	34.6	7.2	19.0	15.7	1.2	.1	0.0	.3	22.0	100.0	49.7

Source: Survey on Foreign Workforce Employment, Ministry of Employment and Labor (2011)

Table 18. Percentage of Remittance against Monthly Wage of Foreign Workers

(Unit: %, 10,000 won)

		Monthly Wage (A)	Amount of Remittance (B)	B/A×100
Total		161.6	76.6	47.4
Gender	Male	166.7	86.0	51.6
	Female	142.7	46.8	32.8
Visa Type	Non-professional Visa (E-9)	163.8	89.6	54.7
	Working Visit Visa (H-2)	156.5	49.7	31.8

Source: Survey on Foreign Workforce Employment, Ministry of Employment and Labor (2011)

3. Impact of foreign workers on the labor market

Hiring foreign workers gives rise to both benefits and costs, which are diverse in terms of economic, social and cultural aspects. Benefits from foreign workforce employment include solving labor shortages, contributing to the national economy, creating pro-Korean workers, promoting the Korean wave, increasing the demand for Korean products, and enhancing Korea's contribution to globalization. Costs, on the other hand, include fewer jobs for domestic workers, deteriorated working conditions for domestic workers, social conflict, increased costs for hiring and managing foreign workforce and aggravated social problems brought by the settlement of foreign workers. It is necessary to discuss benefits and costs and evaluate the performance of the system, by comprehensively taking into account such benefits and costs with regards to the operation of the EPS.

The EPS has installed various institutional tools to minimize adverse impacts that could arise during the admission and utilization of foreign workers. These include reducing corrupt practices on the sending-side and enhancing transparency of the admission process, strengthening educational training, establishing measures to protect the labor market for domestic workers, training existing workers and providing employers and foreign workers with counselling services. All these are considered efforts to increase benefits and reduce costs. Examples of measures to protect the labor market for domestic workers include restrictions on the employment(industry, occupation, number, etc.) of foreign workers, strengthening of the labor market test and the prevention of discriminative treatment against foreign workforce, among others. All of these measures are currently in place and additional steps to enhance the effectiveness of the system are being pursued.

The most negative aspect of foreign workforce employment is the impact on the jobs and working conditions of domestic workers. These issues have been addressed in previous studies that analyze the post-EPS impact of foreign workforce employment on the labor market for domestic workers, but results have been inconclusive so far.[41] Since the initiation of the EPS, while recognizing small negative impacts on the wage and employment of domestic low-skilled workers, studies have been cautious to draw conclusions as results could depend on the subject, data and period of analysis.

[41] Refer to Kyu-Yong Lee *et al.*, (2011) and Kyungsoo Choi (2011), which outline preceding studies and analyzes the impact of foreign workers on wage and employment, for further insight and information.

However, in principle, the increase in the supply of foreign workers is very likely to cause negative impacts on working conditions such as employment and wages of domestic workers who are in a competing relationship with them. In reality, concerns have been raised in industries such as construction, voicing that jobs have been taken from domestic workers. Nevertheless, the impact of foreign workers on the domestic labor market seems to grow as their inflow rises. Table 19 compares the share of foreign workers in workplaces hiring foreign workers between 2005, shortly after the EPS was introduced, and 2011. The table illustrates how rapidly the dependency on foreign workers has progressed. Between 2005 and 2011, the proportion of foreign workers rose in all industries: from 4.4% to 17.7% in manufacturing, from 0.9% to 55.6% in construction, from 9.4% to 72.7% in agriculture and livestock and from 13.2% to 24.0% in services. The upward trend is also witnessed in establishments of all sizes: from 17.5% to 41.8% in workplaces with less than 5 employees, from 11.0% to 27.8% in places with 5~9 employees and from 5.4% to 21.4% in places with 10~29 employees.

It is not clear however whether the reason behind this trend is the substitution of foreign workers for domestic workers, employers' preference for foreign workers, or increased difficulty in recruiting domestic workers. Further intensive analysis would be required to determine the reason, but more importantly, the statistics are a clear testimony to the fact that the inflow of foreign workforce exerts an increasingly stronger influence on the domestic labor market.

Table 19. Foreign workforce ratio at workplaces hiring foreign workers

		2005			2011		
		Foreign Worker	**Domestic Worker**	**Foreign Workforce Ratio**	**Foreign Worker**	**Domestic Worker**	**Foreign Workforce Ratio**
Industry	Manufacturing	34,926	766,097	4.36	205,262	956,004	17.68
	Construction	91	10,117	0.89	14,756	11,792	55.58

	Agriculture and Livestock	380	3,661	9.40	12,561	4,717	72.70
	Services	10,523	69,406	13.17	34,695	110,166	23.95
	Fishing	6	465	1.27	3,096	620	83.32
	Unknown				488		100.00
Firm Size (Number of Employees)	Less than 5	19,163	90,603	17.46	90,736	126,289	41.81
	Between 5-9	7,293	59,087	10.99	35,926	93,193	27.82
	Between 10-29	11,805	206,050	5.42	73,767	271,610	21.36
	Between 30-49	3,415	121,306	2.74	26,826	145,875	15.53
	Between 50-99	2,374	144,738	1.61	22,618	171,733	11.64
	Between 100-299	1,178	165,855	0.71	15,374	194,020	7.34
	300 or More	107	49,820	0.21	1,034	63,280	1.61
	Unknown	591	12,287	4.59	4,577	17,299	20.92
Total		45,926	849,746	5.13	270,858	1,083,299	20.00

Note: 1) Based on workplaces that reported hiring foreign workers between 2004 and June 2011.
2) Foreign workforce ratio=[foreign workers/(foreign workers+domestic workers)]×100.
Source: EPS-Employment Insurance DB matched panel data, Korea Employment Information Service, recited from Dong-Hoon Seol, Kyu-Yong Lee and Yong Jin Nho (2011).

V. Policy Issues and Challenges of Foreign Workforce

1. Problems of policies on foreign workforce

Korea's system for low-skilled foreign workers operated under the Employment Permit System (EPS) is a foreign workforce provision through public institutions and has several merits: selecting appropriate workforce that meets the needs of the host country, eradicating corrupt practices involving labor exports, adjusting country-specific labor quota and inducing sending countries to manage its foreign workforce by associating foreign workforce employment and the management system with the respective quota. The system has also contributed to the improvement of labor rights through the application of the minimum wage law or the labor relations law on foreign workers. These merits are considered to be better than in countries such as Taiwan or Singapore that have a foreign workforce systems similar to Korea and the EPS has earned global recognition as proven by its receipt of the UN Public Service Award in 2011.

Such positive recognition is largely based on the institutional framework of the EPS, but doubt has been raised over the appropriateness of the current provision system from a labor market perspective or an economic perspective on the cost-effective ways on the utilization of foreign workforce. As low birth rates and population aging start to directly influence the labor market, there are calls for increased demand for the foreign workforce. But the increase in the supply of a low-skilled foreign workforce has mainly affected the disadvantaged in the labor market, leading to criticism that the growing influx of foreign workers could cause social costs to rise further and that maintaining the current system of foreign workforce provision could end up interfering with industrial restructuring and thus result in loss of competitiveness. In order to serve its goal of protecting the labor market for domestic workers, the EPS in its admission stage does not take into account the skills of workers. However, providing existing employees with training opportunities and allowing a five-year stay is inducive to enhanced productivity or skill levels. This implies that a policy decision needs to be made regarding the skill level of foreign workers. The following deals with current issues related to the system on low-skilled foreign workers. [42]

A. Problems with expanding foreign workforce quota based on labor shortage

The expansion of the foreign workforce has so far been based on the shortage of production workers and the increased demand of employers for foreign workers. The Foreign Workforce Policy Committee determines and announces the appropriate size of foreign workforce to be admitted every year, but this number includes only low-skilled workers entering through the EPS

[42] Based on Kyu-Yong Lee, *et al*., (2011) and Kyu-Yong Lee (2012).

and Working Visit Program (WVP) and does not apply to high-skilled workers with a professional visa.

The domestic labor market situation, labor supply and demand by industry, and the possibility of supplementing the domestic workforce are taken into account in the calculation of the quota for low-skilled foreign workers. In aggregate terms, there is a set ceiling for the quota at a level that has minimum impacts on the domestic labor market which is then used as an internal guideline. The quota for foreign workers to be newly admitted is estimated and determined after considering the number of current illegal residents and replacement for those leaving the country. The reasoning behind this depends mostly on labor shortage and employment situation relating to business cycle fluctuations. There are limitations to labor shortage statistics, but considering the current supply and demand in the labor market, the rise in the demand for foreign workers will inevitably continue.

According to Table 20, the labor shortage statistics imply that the labor shortage rate of workplaces with less than 30 employees-where the concentration of foreign workforce is the highest—has not decreased despite a continuous increase of foreign workers. In particular, the fact that the labor shortage rate did not fall even during the period of economic slowdown in 2009 suggests that problems of labor shortage have persisted in small-sized workplaces for a long time.

Table 20. Overall and Production Worker Shortage Rates (2006～2010)

(Unit: %)

		Overall					Production Workers				
		2006	2007	2008	2009	2010	2006	2007	2008	2009	2010
Overall (workplace Size)	5-9 Employees	5.1	5.2	4.3	4.5	5.3	7.1	6.9	5.6	5.2	7.4
	10-29 Employees	3.2	3.5	3.4	2.9	4.0	4.9	4.9	4.3	3.7	5.7
	30-99 Employees	2.3	3.3	2.6	2.6	3.3	4.0	4.8	3.4	3.2	5.0

	100-299 Employees	2.4	2.8	2.4	1.9	2.5	4.3	4.2	3.3	2.5	3.3
	300 or More Employees	0.6	1.1	1.3	1.3	1.7	0.8	1.0	1.2	0.8	2.1
	Overall	2.7	3.2	2.8	2.6	3.3	4.1	4.4	3.6	3.0	4.7
Manufacturing Industry	5-9 Employees	7.8	8.1	6.1	7.4	9.2	9.7	9.4	6.9	8.1	10.7
	10-29 Employees	5.2	5.1	4.8	4.5	6.5	6.5	6.1	5.4	5.0	7.6
	30-99 Employees	2.6	3.3	3.3	2.9	4.7	3.2	3.8	3.6	3.2	5.6
	100-299 Employees	1.2	1.7	1.7	1.3	2.5	1.5	1.8	1.8	1.5	2.8
	300 or More Employees	0.6	1.0	1.0	0.8	1.6	0.6	0.8	1.0	0.6	2.1
	Overall	3.0	3.4	3.1	3.0	4.5	3.7	3.9	3.5	3.3	5.4

Source: Special Survey on Employment Trends, Ministry of Employment and Labor, recited from Kyu-Yong Lee *et al.*, (2011).

The decision as to which aspect of labor shortage should be solved with foreign workers is of crucial policy decision. On the other hand, however, making that decision without considering the causes of labor shortage, and merely addressing the issue by supplying foreign workers is not going to alleviate the problem.

Meanwhile, the current EPS has a principle of preferential recruitment of domestic workers, which requires attempts to hire domestic workers first, but the principle has not been effective. In fact, employers tend to prefer foreign workers due to the high job turnover rate of domestic workers and low employment costs of foreign workers.

This preference has structural aspects, in addition to labor shortage. As Table 21 shows, there are various reasons for preferring foreign workers besides lower wages, including foreign workers' willingness to work for longer hours and domestic workers' frequent job turnover. Such results imply that employers may prefer foreign workers even when domestic workers are available. This appears to have led to the increase in demand for foreign workers, subsequently leading to a greater impact on the market for domestic workers. As Table 19 shows, a workplace with foreign workers will very likely continue to face problems of labor shortage as long as it maintains short-term circulation with growing dependence on foreign workers. Given that the employment-population ratio is stagnant, with a polarized labor market and one of the highest proportion of low-wage workers among OECD countries, the continued expansion of the foreign workforce needs to be thoroughly reviewed.

Table 21. Reasons for Hiring Foreign Workforce (2010)

(Unit: Average Score)

	Number of Cases	**No domestic worker available**	**High job turnover of domestic workers**	**Lower wages of foreign workers**	**Better work ethic of foreign workers**	**Foreign workers are more obedient**	**Foreign workers prefer long working hours**
Manufacturing	105	3.81	3.76	3.27	2.87	3.12	3.18
Construction	71	3.13	3.15	3.30	2.62	2.93	2.86
Food Service	73	4.51	3.73	1.84	2.56	2.37	2.59
Agriculture and Livestock	33	3.94	3.88	3.33	3.00	3.70	3.06
Fishing	33	3.70	3.76	3.55	2.67	3.48	2.88

Note: Based on 5-point scale: strongly disagree=1; disagree=2; neutral=3; agree=4; and strongly agree=5. The higher the score, the more the corresponding reason is valid.

Source: Recited from Kyu-Yong Lee *et al*., (2011).

B. Possibility of settlement of foreign workforce

Experiences of advanced economies have well implied potential problems resulting from a possible increase in social expenses that long-term stay and settlement of low-skilled foreign workforce may cause. The EPS has so far maintained the simple principle of a short-term circulation, but appears to leave open the possibility of long-term stay of foreign workers. The system on the non-professional foreign workforce has consistently extended the stay period for the reason of securing skilled foreign workers who have worked for long periods in Korea. This long-term stay is most likely to increase the expectation of settlement, and when failing to do so, foreign workers are likely to choose to stay in Korea as illegal residents.

The law that allows the re-entry of foreign workers who satisfy certain requirements, introduced in 2012, can be perceived as actually raising the possibility of foreign workers settling in Korea. The problem is whether these foreign workers who choose to extend their stay and even settle in Korea are capable of delivering high productivity or generating income that corresponds to that of professional workers. Most of the foreign workforce are known to be working for low-skilled jobs that require less than six months working experience, suggesting that the long-term stay of foreign workers does not guarantee high productivity and therefore their settlement may impose social costs. Thus, it is necessary to ensure that granting permanent residence or settlement in Korea should be determined through selection procedures to check proper qualifications, not as a result of long-term stay in Korea. The system should be revised to prevent the extension of stay of foreign workers.

Table 22. Changes in the Length of Stay for Non-professional Foreign Workforce

◦ 1st Apr. ’00: Training-for-Employment Program (2-year training period+1-year employment) was introduced. ◦ 18th Apr. ’02: Training and employment periods were extended (2+1 for those who entered Korea before 17th Apr. ‘02, 1+2 for those entered afterwards) ◦ 31st May ’05: Act on the Employment, etc, of Foreign Workers revised (2nd revision) - Reemployment limitation period shortened: 1 year → 6 months ◦ 30th Nov. ’05: Enforcement Decree on the Act on the Employment, etc, of Foreign Workers revised (2nd revision) - In accordance to the Act on the Employment, etc. of Foreign Workers, the reemployment limitation period applied to hiring those who completed the 3-year employment period was shorted to 1 month: previously 6 months. ◦ 16th Sep. ’09: Act on the Employment, etc, of Foreign Workers revised - Foreign workers whose 3-year employment period is soon to be expired may be given one-time permit to extend their employment for a period not longer than 2 years at the request of user. ◦ 3rd Mar. ‘12: Currently 3+2 → after 3 months → 3+2 (those who meet the required qualifications)

C. Mismatch between beneficiaries and cost bearers in the use of foreign workforce

Foreign workforce employment accompanies benefits and costs at the same time, and one of the problems inherent in the EPS is that most of administrative expenses incurred from employment support and utilization of foreign workers is imposed on the general public.

Direct costs include administrative expenses to support admission and stay of foreign workers through the EPS, job training expenses (funded by the employment insurance), and other administrative expenses to help them return to their home country. Another significant cost is the loss inflicted on domestic workers resulting from the local labor market disturbances caused by the inflow of foreign workers. Social expenses incurred by the increased inflow of foreign workers are difficult to measure, but can be seen to fall under an understandable category of costs.[43] Most of these expenses are shouldered by the public, and employers or foreign workers, who are the direct beneficiaries, are not incurring any costs.

Meanwhile, in terms of costs, another problem is the structure of foreign workforce employment. Currently, as the demand for foreign workers is mainly found in small-sized firms and most of the foreign workforce in supply are low-skilled workers, the base to increase the benefit to cost ratio is likely to be undermined. Using foreign workers to simply alleviate labor shortage of uncompetitive small-sized firms could delay industrial restructuring and hence weaken national competitiveness in the long run. Moreover, there could be other social and economic expenses such as problems of delayed wage payment and high rate of industrial accidents involving foreign workers, which are more likely to occur in small-sized sectors.

D. Restricting firms' choice of foreign workforce under a supply-driven system

[43] This was estimated thorough the Contingent Valuation Method (CVM) in Kyu-Yong Lee *et al.*, (2003) and Hae Chun Rhee *et al.*, (2012, unpublished).

Current policy on foreign workforce is operated mainly by providers in its process of selecting foreign workers, restricting the firms in need of manpower from selecting their own workforce, making it difficult to recruit appropriate foreign workers who meet the needs. To be more specific, a firm in need of foreign workers is only allowed to recruit from among a three-fold number of applicants who passed the Test of Proficiency in Korean (TOPIK) in the list provided by agencies. This process does not provide firms with necessary information as to applicants such as work experiences, character or personal background. Even in the case when such information is available, most firms are in doubt of its credibility. [44]

The biggest problem is that firms have difficulties in verifying whether these foreign workers have the necessary qualifications or skills. Since the current recruitment process lacks consideration for task suitability and skills, many firms have difficulty in recruiting the workers they need. Limiting the right to choose has led to a suboptimal selection of foreign workforce, so the host country ends up paying for the human capital accumulation of foreign workers.

E. Policies on ethnic Koreans

The Working Visit Program (WVP) is largely viewed from the two perspectives of ethnic Korean and labor market policies. The former prioritizes integration of ethnic Koreans into the domestic labor market, whereas the latter takes a regulatory stance by viewing them the same as other foreign workers. From the labor market perspective, while ethnic Koreans engage in greater competition over jobs with domestic workers than other foreign workers, they are not receiving proper employment support.

Meanwhile, ethnic Koreans are allowed to undertake unrestricted job-search, but in reality, often find it difficult (due to language, lifestyle etc.) to find employment on their own. This

[44] Available information as to foreign applicants in the system are age, marriage status, gender, height, weight, eye sight, color-blindness, highest level of school completed, major, picture, etc.

results in cases of job search through illegal recruiting agencies, which charge commission or arrange jobs in unauthorized business sectors. In particular, ethnic Koreans without family or friends could end up in a situation where they cannot even afford basic livelihood, possibly leading to illegal employment and social issues. This unofficial route of employment has exposed ethnic Koreans to problems such as employment instability and delayed payments. In addition, there are no efficient policies to support them in job training and find stable jobs. Whichever approach it may be, there is an urgent need to establish a policy stance toward incorporating ethnic Koreans into the labor market and providing support for their settlement in Korea.

F. Lack of comprehensive policy management system for foreign workforce

The current foreign workforce policy takes a divided approach on professional and non-professional workers, making it difficult to comprehensively decide on the scale of workforce, policy implementation system and strategies to attract workers. Relevant laws, regulations or institutional administration system that addresse the foreign workforce in a comprehensive manner are yet to be established.

The number of foreign workers to be admitted is determined on an annual basis, but the number includes only non-professional workers. This decision process is not consistent with a medium- and long-term perspective, as it only focuses on short-term labor shortages. It also lacks consideration for different types immigrants, such as international students and marriage migrants. Further, the establishment and implementation of foreign workforce policy have been short-sighted, focusing on imminent problems, leaving little room for comprehensive consideration of responses to medium- and long-term structural changes to the demographic, labor market and industry structure.

Consequently, the need for foreign workforce policy management which takes into account demographic changes, impacts on the labor market for domestic workers, changes in the industry structure, enhancing firms' competitiveness, and the reduction in social expenses resulting from the admission of foreign workers, has not been given comprehensive consideration. Another constraint is the lack of basic research and statistics needed to establish and operate foreign workforce policies.

2. Challenges for foreign workforce policy[45]

A. Defining the operational principles of foreign workforce system

The principles of using low-skilled workers granted temporary stay need to be reflected in the system operation and are as follows. First, the principle of complementing the domestic labor market. It is important to uphold the principle that foreign workforce employment should be maintained at a level that does not negatively affect the employment, wages and working conditions of domestic workers. Second, the principle of preventing settlement. The EPS only allows a one-time extension of stay for a period not longer than three years so as to prevent the low-skilled foreign workforce from settling in Korea. At the time the EPS was introduced, long-term residents of 5 years and more were not legalized and deported. This policy on re-employment was revised afterwards to accommodate demand, permitting employment/stay for a period not longer than 5 years without departure and even allowing a qualified few a maximum 10-year stay. The positive side of this is the use of skilled workers, but negative in light of social cost caused by their permanent settlement. Third, the principle of not interfering with industrial restructuring. This is to prevent foreign workforce from negatively affecting industrial and corporate restructuring. Utilizing low-wage foreign workers could make firms grow complacent

[45] This section is based on the discussions in Young-bum Park *et al.*, (2010), Kyu-Yong Lee *et al.*,(2011) and Kyu-Yong Lee (2012).

and thereby delay restructuring, eventually weakening the competitiveness of both businesses and the nation in the long run. With continued efforts to reform and restructure so as to upgrade competitiveness in the face of rapidly changing conditions in the economy and society, foreign workforce employment should not uphold a declining, uncompetitive industry and thereby undermine the process of industrial restructuring necessary to move toward a higher value-added economy and advanced industrial structure. The current cost-effective foreign workforce system could hold back industrial restructuring and weaken job creation, likely hindering social integration.

Fourth, the principle of improving economic and social benefits arising from the use of foreign workforce. As mentioned earlier, hiring foreign workers raises various costs as well as benefits in both corporate and socioeconomic terms. These must be considered when designing or improving the foreign workforce system. For this reason, foreign workforce-related policies and systems, including the size of foreign workforce, industries that are permitted to recruit them, and their terms of stay, should be determined with consideration for not only labor shortages, but also for the comprehensive impacts of foreign work employment on the labor market and the society as a whole.

B. Protecting the labor market for domestic workers

Generally, one way to protect domestic workers is the labor market test, which is designed to evaluate qualified migrants against domestic workers who are interested in a vacancy. The employer is required to prove that no qualified domestic worker is available for the vacant job and that employing foreign workers does not adversely affect the wage and working conditions of other employees working in the same sector. This test aims to protect and promote the interest of local workers in terms of wage and working conditions and to sustain a balance, while at the same time provide employers who are willing to follow the defined and agreed rules with access to a predictable supply of needed foreign workforce.

However, there are a number of obstacles to implementing this system. A main problem is that in cases where preliminary efforts to recruit domestic workers were unsuccessful, it is difficult to identify the reasons and it also incurs huge administrative costs. Given that the frequent job turnover of domestic workers triggers expensive transaction costs, labor market tests are unlikely to be effective. Nevertheless, this is an important requirement and helps identify the demand for foreign workers as it requires foreign workers to be complementary to domestic workers.

So far, efforts to recruit domestic workers have been more of a formality and therefore improvement is necessary. For instance, firms in industries that are permitted to hire foreign workers that could relatively easily recruit domestic workers should be induced to employ domestic workers by requiring them to search for domestic workers for an extended period and by strengthening employment service. Information collected during this process could be used to measure demand(by skill level) and utilize it in foreign workforce policy setting. In addition, recruitment support services need to be strengthened for firms that have a preference for foreign workforce.

C. Strengthening corporate competitiveness through enhancing the productivity of foreign workforce

A few suggestions to that end are as follows. Most of all, it is necessary to operate the selection and recruitment process in an efficient manner. By linking skills tests and vocational training programs, foreign workers who complete training should be given incentives, and a scoring system should be introduced that classifies them by skill level (training program and certificates). It is necessary to keep foreigners with relatively high productivity in the labor pool and let employers select the employees in the recruiting process, so that they can more easily verify the qualification and skillfulness of workers they need.

Further, in cases where workers are able to acquire minimum skills through short-term training, it is necessary to consider opening training courses in both sending and host countries so as to train workers to acquire necessary basic skills before placing them in firms. Offering short-term training programs at occupational training agencies should be considered when job training is required after entering the country. Finally, the sending country or the foreign worker, and the employer as well when deemed necessary, should primarily bear the costs of this process.

D. Reducing social expenses on foreign workforce employment

The government needs to first set a clear principle as to whether to use foreign workers entering Korea through the current EPS as those able to settle as permanent residents in Korea. There have been discussions on accepting the existing foreign workforce as permanent residents based on their completion of education, training and certificate acquisition. In reality, this is partly inevitable, but fundamentally, the use of foreign workforce needs to be controlled by immigration policy. Granting incentives on grounds of a lengthy stay in Korea should be avoided, and certain principles of sorting out potential permanent residents should be applied at the entry stage. In order to develop this principle, judgement criteria on the type of foreign workforce necessary and selection methods are needed. As for high-skilled workers, reviewing visa requirements as stipulated in the Immigration Control Act and lifting requirements for general naturalization in the Nationality Act can be considered, while strengthening the same requirements for non-professional workers. To extend the required period of stay for naturalization to 10 years or longer and to verify the ability to support himself based on assets and skills is necessary. At the same time, active responses must be taken regarding illegal residents. The success of the EPS lies in minimizing the number of foreign workers overstaying their visa. Given that 2012 is the first year that workers start to reach their maximum length of stay. Thus it is important that the return process operates smoothly and strict measures are taken against employers who hire illegal workers.

E. Setting the policy direction on ethnic Koreans

A decision needs to be made regarding whether the issue of ethnic Koreans shall be approached from a labor market perspective or be based on the overseas Korean policy. Current labor market conditions call for regulation of the inflow of ethnic Koreans, but policies for ethnic Koreans have a specific context. A focus on human resource development and employment support to meet the demand of domestic employers is necessary. Substitution of ethnic Koreans for foreign workers is likely to be inefficient, considering the difference between ethnic Koreans and the general foreign workforce, employer’s needs for a diverse foreign workforce, and the issue of allowing employer change.

Then, it is necessary to prepare for the settlement of ethnic Koreans. Policies that foster socioeconomic integration are needed as current policies on ethnic Koreans are partly linked to permanent residency. In order to minimize social expenses incurred by the settlement of ethnic Koreans, reflections on the optimal inflow is important. Of 1.4 million foreigners staying in Korea, approximately 480,00 are ethnic Koreans from China. The increase in their number has led negative impacts, including family breakdowns and the weakening of the autonomy status of Korean communities such as Yanbian in Northeastern China. In addition, these ethnic Koreans staying in Korea face increasing job competition with domestic workers and the neighborhoods where a majority of them live are facing concerns over ghettoization and social conflicts.

Therefore, while helping ethnic Korean communities in China to sustain themselves, policies are necessary to manage the number of inflow and to socially integrate them. The effectiveness of social integration policies could be enhanced by providing support and implementing labor market policies at a local community level in collaboration with local governments.

F. Strategies to attract highly skilled workforce

The following explains measures to attract highly skilled foreign workers.

First, it is necessary to establish a policy support system that satisfies the demand for a diverse professional foreign workforce. The use of a competent professional workforce has a wide spectrum according to the workers' level of skills, and the system needs to be modified to fit this spectrum. In other words, various demands for foreign workforce incorporates a strategy to attract SME-type competent workers, large enterprise-type strategy to use global human resources, short-term residents with the purpose of spreading global-level talents, and therefore it is necessary to seek ways to adjust the selection and support of foreign workers to meet the various policy targets.

Advanced professional workforce should be granted supply-side incentives such as income tax exemptions, to work for domestic firms. In order to promote the SME's use of professional foreign workforce, efforts are required to support the demand side by supporting the process of finding and hiring competent foreign workers as a way of reducing transaction costs. In particular, it is necessary to strengthen the administrative support system to reduce the transaction cost of firms and firms' labor costs through enhanced efficiency in tax benefits and residence support, all of which are supportive strategies both in terms of supply and demand. While redefining the scope and concept of professional workers, it is necessary to modify the relevant administrative support system. The efficiency of immigration administration should improved in association with labor market conditions and the policy delivery system related to the selection and placement of workers. Coordination between relevant ministries or administrative agencies is necessary so that delivery systems are tightly integrated.

Since the majority of professional workforce comes from less than ten countries, concluding labor migration agreements with countries whose workers are in high demand should be considered so that those workers may receive support in the recruitment process and after employment. The MOU under the current EPS could serve as a reference.

Second, reclassification of professional workforce according to different target groups and a more flexible strategy to attract workers is needed. Professional foreign workforce should be categorized into three levels of advanced professional, general professional and quasi-professional, based on their wage level and through a point system. Global advanced workers refer to those who are internationally recognized in their fields, such as science, art, education, business and athletics. Instead of providing permanent residency or other visa incentives, certain review criteria need to be developed, and sometimes more bold benefits offered, that allow them to enter and exit more freely and disseminate and transfer their expertise. In particular, aggressive support such as granting permanent residency to foreigners with outstanding talent in science, culture and arts, and athletics and also assisting them with support such as earned income tax exemption for a certain period, living expenses for settlement and expenses for family relocation could be considered as a way to enhance national competitiveness.

General professional workforce refers to foreign workers who have highly advanced skills that are unavailable at all in Korea or available but inaccessible. The spectrum of these foreign workers is diverse in skills and therefore needs classification by certain standards for efficient policy implementation. To that end, it would be appropriate to refine the current point system and provide incentives to those with high scores, but subject those with low scores to the quota system, considering labor market conditions. Also, active measures are needed to cope with an expected rise in the need for workers in social welfare fields (nurses, etc.), as brought by the advancement of the industrial structure and population aging,

Quasi-professional workforce refers to those who do not belong to the category of professional workforce but still have a certain level of skillfulness required in the domestic labor market, which include some of E-7 visa occupations such as shipbuilding welders or sales persons and those with a permit to work as a skilled professional worker.

Given that quasi-professional workers are likely to disturb the labor market for domestic workers, the treatment toward them should be differentiated with some restrictions, such as sectoral and occupational quota and limitations on accompanying family members, with the ceiling on the maximum stay period of 3 years plus 3 years, like the H-1B (temporary professional worker) visa in the US, in order to prevent foreign workforce employment from infringing the employment of domestic workers. In addition, it is necessary to review the regulation on the lower limit of wage at a reasonable level in comparison with the average wage of domestic workers in order to prevent the market from being driven by the low wage and also to protect employment for domestic workers. Meanwhile, by applying the point system to quasi-professional workers, flexible policy establishment should be made possible such as setting the quota according to changing environments in the labor market. When quasi-professional workers acquire certain qualifications, the system must work to help them upgrade their status to professional workers, and by doing so, they will be encouraged to improve their skills and become integrated into the Korean society.

Third, the labor market should respond in a more flexible manner. Since the demand for labor changes with changing labor market environments, the criteria for selecting workers should become flexible, reflecting the changes in the labor market. To that end, it is necessary to develop an institutional mechanism that helps revise the selection criteria of occupations in demand of foreign workers in a timely and prompt manner. An institutional instrument and a system to operate the instrument need to be developed to assess and control the demand of workers by making changes to the point system accordingly.

Fourth, it is necessary to develop a system to support the efficiency of human resource management within a company. Creating an educational, social and cultural environment has been highlighted as a way to attract professional foreign workers. While this is important, it is also necessary for the employer to promote the efficiency of foreign workforce management. Recommended measures include removing the gap between heterogeneous cultures within the workplace and removing discriminatory practices related to personnel management, which may help realize social integration policies at the firm level.

Fifth, a full-scale review is needed on the strategy to attract and utilize foreign students. Admitting foreign students incurs various practical benefits, such as increasing revenues, promoting globalization of Korea and attracting competent foreign students. However, the current policy on foreign students is focused mainly on attracting them, not utilizing them. To enhance policy effectiveness, the selection system and administration needs to be improved. Also, the view that considers this policy as a tool of financial support to university needs to be abandoned, and instead consider the policy an investment in foreign human capital that could be utilized in Korea. There is a need to search for diverse strategies from the perspective of domestic labor market policy and overseas expansion, such as promoting internship programs in connection with SMEs expanding overseas and supporting the labor market transition of foreign students.

G. Implementing foreign workforce policy with medium- and long-term perspective

The matter of addressing foreign workforce policy needs to begin with consideration of industry restructuring and labor market structural changes. Furthermore, the policy to attract and use a foreign workforce should be implemented with the reflection of various policy factors such as attracting a professional foreign workforce, encouraging the cross-border mobility of the workforce and developing overseas markets. The foreign workforce issue requires liaison/cooperation among various policy implementation systems, including labor market and social cohesion policies, not to mention visa policy from the perspective of the labor mobility.

Current policies mainly driven by the supply side based on short-term labor shortage are inappropriate in terms of social expenses. To deal with such a problem requires re-examination of the foreign workforce policy implementation system and a central administrative entity that coordinates immigration policies.

References

Cho *et al*., Directions for Foreign Worker Policies to Enhance Competitiveness, Ministry of Justice, 2009.

Choi, Kyung Soo *et al*., “Future Policies on Immigrants and Foreigners”, National Research Council for Economics, Humanities and Social Sciences, 2010.

Lee, Kyu-Yong, Paper presented at the 8th Anniversary of Employment Permit System: Evaluation and Challenges (in Korean), 2012.

Lee, Kyu-Yong *et al*., An Analysis on the Labor Market Of Highly Skilled Foreign Workers, Korea Labor Institute, 2005.

Lee, Kyu-Yong *et al*., Analysis of Foreign Workforce Labor Market and Study on Improvement Direction of Medium- and Long-term Management System, Korea Labor Institute, 2007 (in Korean).

Lee, Kyu-Yong *et al*., An Analysis on the Labor Market of Foreign Workers, Korea Labor Institute, 2011.

Lee, Sang Lim, The Change of Multicultural Families and Policy Issues, Health·Welfare Issue&Focus, Korea Institute of Health and Social Affairs, 2011.

Park, Young-bum, Dong-Hoon Sul and Kyu-Yong Lee, A Study on Medium- and Long-term Development Direction of Foreign Workforce Policy, Ministry of Employment and Labor, 2010 (in Korean).

Seol, Dong-Hoon, Kyu-Yong Lee and Yong Jin Nho, Plan for Foreign Worker Levy System, Ministry of Employment and Labor, 2011 (in Korean).

Statistical Yearbook on arrivals, departures and immigration policies, Korea Immigration Service, Ministry of Justice, various years.

Statistics Korea, Statistics on Marriages and Divorces, 2012.

Yoo, Gil Sang *et al*., An Analysis on the Labor Market of Low-skilled Foreign Workers, Korea Labor Institute, 2004.

Yoo, Gil Sang *et al*., Assessment and Policy Directions of the Employment Permit System, Ministry of Employment and Labor, 2011.

Korean Child Care Policy:
Current Status and Improvement

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Summary

This study attempts to design details of child care policy by suggesting the policy direction optimized to understand multi-layered goals of child care policy and pursue policy goals.

This study suggests the following child care policy goals based on Korea's current situations such as severe low fertility rate and rapid population aging: the development of young children, the acceleration of women's labor force participation and the increase in fertility rate.

In pursuit of the three goals above, the direction of current child care policy appears to have the following problems.

First, the focus on child rearing cost reduction as a way to increase the fertility rate has resulted in hindering incentives for women to work. So far, Korea's child care policy has gradually expanded child care subsidy and the amount and eligibility of home care allowance, while maintaining its focus on reducing the parental burden of child rearing cost. However, child rearing subsidy has been known to be more effective in easing the postponing of childbirth than in increasing the number of children born.

Second, a full-day child care subsidy is being provided to all young children (infants(aged 0), toddlers(aged 1~2), and preschoolers(aged 3~5)) regardless of household income and employment status (working or non-working) of mothers. The children from high income

households will not benefit much from additional inputs of educational resources, since they have already been exposed to various educational opportunities and received comparatively more resources to develop their capabilities. In this case, support for those from low income households are deemed equal in the sense that such support could act to reduce the education gap between different income classes. Meanwhile, stimulus needed for child development is considered to be available at home to some extent, in the case the mother is on maternity and parental leave or non-working and therefore able to personally take care of the child.

Third, the increase in home care allowance could undermine the incentives for women to work and deepen the income disparity. Providing the allowance even to preschoolers could widen the education gap between different income classes. When home care allowance is raised, it is most likely that low-income and less-educated women, in particular, with lower opportunity costs of not participating in the labor force will choose home care allowance over child care subsidy and leave the labor market. When home care allowance is extended to include preschoolers, low-income and less-educated mothers who choose to receive the allowance may not be able to provide their children with sufficient learning stimulus and educational resources needed for the development of children.

Fourth, some have argued for introducing child benefit, but as described earlier, cash support like child benefit are not that effective in increasing the fertility rate and enhancing women's labor force participation. Besides, there is no guarantee that the benefit is strictly used to buy resources necessary for the health and education of children. So, a more desirable method would be to assist children with benefit in kind and services so that the support directly benefits the children.

Fifth, it is fortunate that the government is planning to gradually strengthen its monitoring and information disclosure of child care centers. So far, since it has been difficult for parents to examine the quality of child care services, the market mainly consisted of low quality care services. As parents are unwilling to pay a high price for services without an accurate check of quality, facilities tend to choose low-priced low-quality care services produced at a low cost over high-priced high-quality services produced at a high cost. Also, insufficient monitoring of child care centers sometimes causes moral hazards under conditions where there is no parental observation such as abuse against young children. In these circumstances, operators of government-run public child care centers may gain larger personal satisfaction from their high-quality care services or their pursuit of private interests may be virtually restrained, which means these facilities may offer higher quality care services compared to private child care centers.

Sixth, limiting the number of licensed child care centers has served to protect the dominant position of existing child care centers by obstructing the entry of excellent new facilities. The number of licensed child care centers can be limited when the quota of child care centers in certain areas exceeds the demand for child care services or the number of enrolled children. Existing child care centers free from the pressure of competition are guaranteed a certain number of enrolled children, which has left them unconcerned about falling behind even if they charge expensive care service fees or turn down parents' requests, just as long as they comply with the law. Also, in order to continuously enjoy their monopolistic gains, existing child care centers are most likely to strongly oppose the government's action to enhance the service quality.

Solutions to these problems are presented below.

Above all, depending on the income level of the household, child care subsidy and home care allowance needs to be provided on a differential scale. Subsidized hours st child care centers need to be revised according to the employment status of the mother. It is also necessary to provide lower income families with more child care subsidy and shorten the current full-day service at subsidized child care centers to a part-time service for the children of non-working mothers or mothers on maternity leave.

In the case of infants (aged 0) and toddlers (aged 1~2), those eligible for child care subsidy and home care allowance should be the same, while seeking a balance between the child home care allowance and the part-time child care subsidy given to non-working mothers or mothers on maternity leave according to their income level. Any excessive increase in home care allowance must be restrained, considering that home care allowance could cause negative impacts such as weakening women's labor force participation and widening the income inequality. Instead, as a way to ensure equal educational opportunities between different social classes, it is desirable to provide customized integrated supports according to the different needs of vulnerable households with young children. In addition, when a number of similar projects relating to the needs of children, benefits, outcomes of support projects and many others are managed comprehensively through a network, it will be possible to provide children in need with customized support in a timely and efficient manner. When the amount of child home care allowance is not enough and therefore limits the options of working mothers preferring individual child care over facility care services, child caregiver service could be provided on a differential scale according to the household's income level and employment status of the mother, as is done for child care subsidy.

Moreover, the government needs to enhance the care service quality by strengthening the information disclosure and monitoring of child care centers. When parents prefer high-quality child care services and are able to accurately discern the quality, facilities will naturally work to improve their service quality in order to draw more children. Furthermore, keen attention needs to be given to the quality of future information disclosure and monitoring so that parents will be able to differentiate excellent, high-quality care services using the detailed information. Also, only when access to such information and comparison of evaluation criteria are made easy to use will the effect of information disclosure be maximized. Among the quality evaluation criteria, the interaction between young children and caregivers particularly needs constant monitoring by parents. Providing parents with simplified evaluation criteria-formulated by experts is another method to help closely look into the qualification of care-giving teachers. In order to maintain care service quality, it is also important to increase the number of personnel in charge of guidance and monitoring of child care centers and thereupon update the information on the quality of care services on a frequent basis. In the case where the quality expected by parents is overall at a low level or they show a preference for particular criteria on quality evaluation, providing the subsidy only to children at a qualified child care center which meets quality requirements to a certain extent would be another option to promote the overall quality improvement in child care services.

Once the system for child care subsidy and home care allowance is revised and detailed information on the quality of child care services is communicated to the public, restrictions on the number of child care centers should be removed. If license limits are deregulated under conditions where a full-day child care subsidy is generally and widely provided, this would result in the increase of new child care centers, hence allowing children of non-working mothers or high income households--who were not able to use center services due to the shortage of facilities--to enroll in facilities for longer hours, free of charge. On the other hand, if restrictions on the number of facilities are removed without a full disclosure of care service quality information to prompt active competition between facilities, this could result in the increase in the number of private child care centers offering comparatively low quality services, leading to degrading the average quality level of child care services.

In this regard, when regulations on the establishment of child care centers are eased after ensuring that the public has easy access to information on care service quality, this could encourage facilities to compete actively in order to secure more children at their centers by improving service quality and reducing expenses. Also, given that existing child care centers in guaranteed dominant positions used their excess profits to oppose the government's actions that could negatively impact their interests, removing the quantity regulation could result in the increase in the number of child care centers which focus on enhancing care services and reducing expenses in order to gain a competitive advantage. But, in order to ensure the healthy development of children, accreditation should be limited to child care centers which meet quality requirements regarding facility establishment, operation and care-giving teachers' qualification so that the high quality level of care services is guaranteed.

In addition, when detailed quality information is made available, new high-quality facilities are approved and children can be transferred more easily, this could stimulate further competition between facilities to attract more children, resulting in improving the quality of private child care centers as their resource allocation becomes more efficient than that of government-run public facilities. In this regard, any increase in the number of public facilities would be better limited to rural areas where private facilities are rare and are not easily established on their own due to insufficient child care demand.

Another suggestion is that when facilities have better incentives to improve care service quality, they would hire more competent care-giving teachers, leading to improvement in their qualification. Enhanced qualification of caregivers means a rise in wages and improvement in employment conditions brought by increased productivity. With less incentives for facilities to upgrade care service quality as is the case today, facilities may attempt to reduce the wages of care-giving teachers based on the amount of government's financial support paid to teachers for improved treatment. Considering this possibility, the government needs to change the universal payment provided to care-giving teachers regardless of their productivity into an autonomous wage system--under which wages and employment conditions are determined according to teacher’s productivity--by putting financial resources into formulating conditions encouraging competition through strengthened information disclosure and monitoring of facilities. If it turns out that under competition, the qualification of care-giving teachers available with the facility's current budget is not high enough to promote the healthy development of children, child care costs should be increased to enhance the wage and employment conditions of care-giving teachers. In this process, social discussions are needed to build consensus on how much of the burden parents need to shoulder for the increase in child care costs. To enhance the quality of care-giving teachers, an emphasis needs to be placed on strengthening their expertise from the beginning stages of fostering such teachers.

Now is the time for Korea to seek ways through child care policy to increase women's labor force participation and promote the development of children, and simultaneously raise the fertility rate. If working mothers are given child care subsidy and able to send their children to child care centers offering high quality services, this could help mothers return to the labor market at the time they want and therefore reduce the opportunity costs of giving birth. When women can pursue their careers after giving birth and do not have to give up the healthy development of their children in the process, this could weaken the avoidance of childbirth.

1. Introduction

Recent revision has entitled all infants (aged 0) and toddlers (aged 1~2) to a full-day child care subsidy, which triggered subsequent changes in child care policy so as to complement the revision. The initial plan for 2012 was directed towards infants and toddlers in the bottom 70 percent of the income bracket, as in the previous year, but as politicians and the government made a sudden change in this plan late 2011 by allowing child care subsidy to all infants and toddlers in all social classes, a number of problems have emerged. Above all, the number of infants and toddlers at child care centers surged, causing a rise in the number of dual income households unable to find available child care centers for their children. Moreover, support for preschoolers aged 3 to 5 years old was available only for households in the bottom 70 percent of the income bracket, resulting in calls for full-scale assistance for children in this age group. A soaring number of facility registered young children (aged 0 through 5) has widely developed the consensus on the need to improve the quality of child care services. Accordingly, the government announced a plan in January 2012, as to which starting 2013, eligibility for child home care allowance will be extended greatly and child care subsidy will be provided to all infants and toddlers as well as those aged 3 through 5 years old. Later in March, the government announced that it has developed detailed guidance to strengthen the monitoring and disclosure of information on child care centers in order to enhance the quality of child care services.

Not only that, some have called for expanding the government's role in the management of child care policy such as more financial support for child care and direct provision of child care services. They are arguing for extending the coverage of home care allowance to include all young children (infants, toddlers and preschoolers) and raising the allowance amount or introducing child benefit, while emphasizing the need for increasing the number of government-run public child care facilities as an alternative to private child care centers offering low quality services.

Then, in September 2012, the government announced its revised child care policy, according to which child care subsidy for infants and toddlers are provided on a differential scale based on income level. Also, depending on the status of the mothers (working or non-working), the children will be provided with a full-day or half-day child care subsidy. Like the previous policy, the revised one keeps preschoolers (aged 3 to 5 years old) entitled to a full-day subsidy regardless of income level, but adds a new plan to provide low income households who do not use facility care services with home care subsidy.

While discussing on these various directions of child care policy, this study attempts to understand multi-layered goals of child care policy and thoroughly analyze how well preceding child care policies, recent revisions and requests for further modification are consistent with policy goals. Also, based on the review of policy goals and means, the study intends to provide detailed policy design by presenting the direction best optimized to pursue policy goals. This study suggests the following child care policy goals based on Korea's current situation of severe low fertility rate and rapid population aging: the development of young children (infants, toddlers and preschoolers), the acceleration of women's labor force participation and the increase in fertility rate. Healthy development of young children is not only an obviously necessary goal in the sense that caring is a service for children, but also the most effective method that could increase the productivity of a new labor force under the conditions of an expected fall in the working-age population. When evaluating the effects of policy tools, this study unfolds its discussions based on existing theoretical and empirical studies so as to not end with a simple statement. In this way, it is possible to conclude which policy, among several recent instrumental revisions, has served as a stepping stone for the rapid progress in child care policy or was an ill-considered decision that has reversed the ideal policy direction.

Korea has so far tended to use the child care subsidy budget of advanced nations as a reference for establishing its own aggregate target, or assumed that a policy widely implemented in many countries is desirable and therefore adopted it without making any changes. So, to be cautious of such tendencies and prevent trial and errors experienced in other countries, this study outlines the context for policy adoption, revisions and accomplishments of similar foreign cases while studying the direction of current Korean policies.

Then, based on the review of policy goals and tools, this study attempts to design details of child care policy by suggesting a policy direction best optimized to pursue its goals. In other words, this study tries to establish disciplines for child care budget allocation by defining the role of government in child care. Moreover, this study suggests additional revisions so that the 2013 revision in child care policy will better reflect the detailed policy design and bring out corresponding effects.

This study limits the scope of child care policy into child care subsidy, home care allowance, quality management of child care centers and relevant systems. When child care policy is defined as governmental intervention to provide young children with proper care and education, it would also broadly include infants and toddlers and children attending kindergarten and academic institutions, policies concerning such institutions, early-intervention service on young children (infants, toddlers and preschoolers) from the vulnerable class and the government’s ‘idolbom project’ which supports individual child rearing. An intensive examination on child care policy in a broader perspective shall be made in subsequent studies. Instead, this study presents a measure that could strengthen the association and complementary relationship among various child care policies so that the goals of child care policy would be pursued more effectively.

This study consists of six chapters including the introduction in Chapter 1. Chapter 2 outlines the goals of child care policy, Chapter 3 introduces current conditions of the policy, Chapter 4 and 5 deals with problems of current policy direction and Chapter 6 suggests measures to improve child care policy.

2. Goals of Child Care Policy

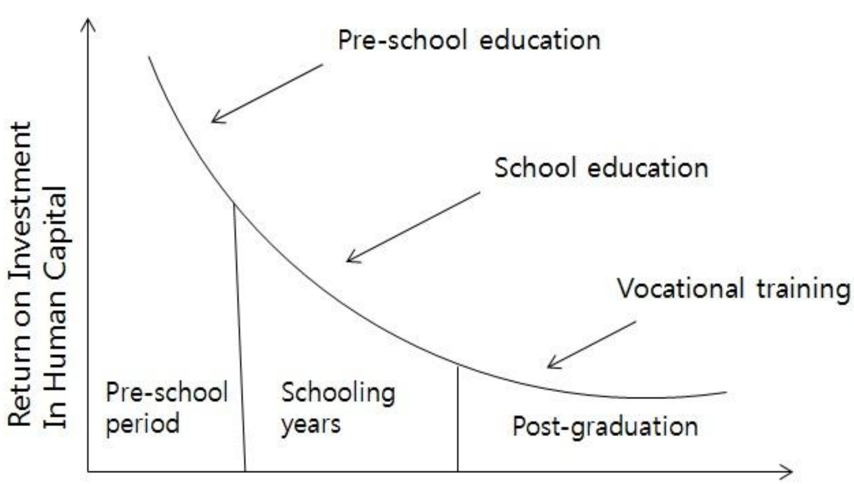
Section 1. Promotion of Child Development

Skills developed early on are a significant determinant to subsequent educational achievements. Skills here are the ability that determines the social and economic success of an individual, also embracing social and emotional abilities including patience, planning ability, discipline and learning motivation, aside from cognitive ability. Such Skills tends to be brought out combining various human characteristics, and an existing capability helps develop abilities in a different scope as well as those in the same scope. In other words, one’s inherent cognitive ability helps further develop new cognitive power more easily or foster existing non-cognitive power. For example, the understanding of numbers and vocabulary enables one to perform calculation and reading, while strong curiosity and learning motivation always lead to higher scholastic achievements.

This is how skill begets skills, and such a process of formulating human capital can be explained by two paths. One is that previously accumulated human capital acts in dynamic complementarity of a newly input resource so as to develop additional capability and thereby serves to double the productivity of new investment. The other is that as the capability at a certain point of time is more advanced, the capability at another point of time grows further, creating new capability, in so-called self-productivity.

Such characteristics of capability therefore show the tendency that earlier investment in education brings out higher returns, and the effect appears to decrease gradually as time passes (Figure 2-1). The reason for high return on investment in an early stage is that earlier developed capability is easy to be supplemented, upgrading the capability not only at the next stage but also at all subsequent stages to be followed later. This at the same time means that when a capability is not developed at an early stage, the productivity of additional education investment might turn out lower, probably leading to less achievements throughout the entire life cycle (Cunha and Heckman, 2008; Cunha and Heckman, 2007).

Figure 2-1. Return on Investment in Human Capital by Age Group



Source: Carneiro and Heckman(2005).

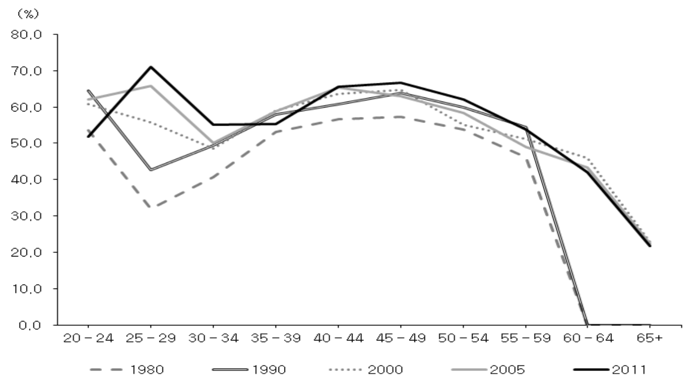
Section 2. Promotion of Women's Labor Force Participation

The labor force participation rate of Korean women aged 15~64 has risen from 46.3% in 1980 to 54.9% in 2011, still lower than the OECD average of 61.8%, mainly because the burden of child rearing has weighed on women, limiting their continued economic activities.
A number of resources confirm that the burden of child rearing has been the main reason behind women’s career disruption.

According to the 2004 National Survey on Current Status of Child Care and Education, 81.0% of mothers with young children answered that they wanted to continue to work but failed to find a safe child care facility or gave up their careers to look after family and raise kids. The 2009 Survey as well shows that 84.3% answered that they are not currently seeking for a job due to doubt on the quality of child care services and the burden of child rearing and household chores, indicating few changes in the child rearing burden over the past five years.

Changes in women’s labor force participation rate by age group over the past three decades confirm the continued M-shaped pattern--displaying that women leave the labor market while raising children and later return (Figure 2-2). Recently, the lowest point has risen, meaning that now conditions have improved for women to pursue careers and raise children, but as of today, other than Korea, Japan is the only nation among OECD members with a clear M-shaped pattern.

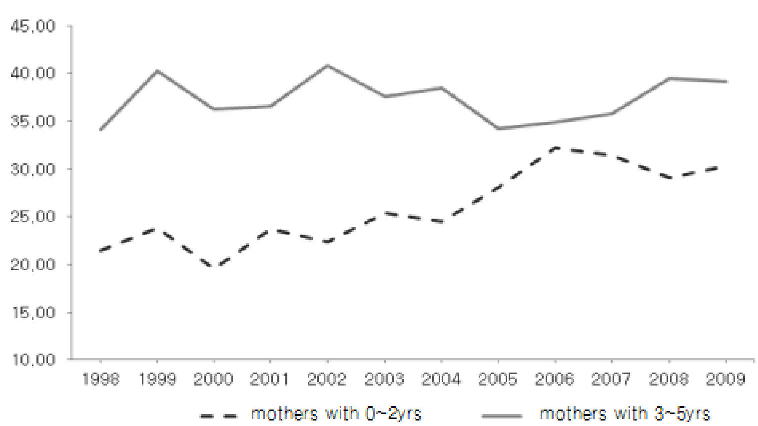
Figure 2-2. Women's Labor Force Participation Rate by Age Group and Year



Note: Based on 1-year job seeking period.
Source: Economically Active Population Survey

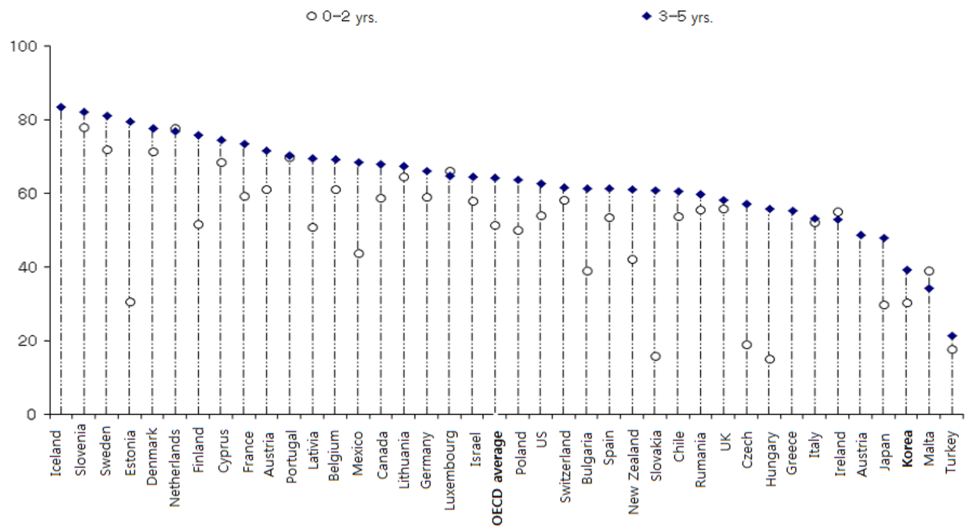
In the international comparison, Korea is found to be under a heavy burden of child rearing. Figure 2-3 shows that Korea's employment rate of mothers with infants (aged 0) and toddlers (aged 1~2) rose to 30.3% in 2009, after ups and down since 21.4% in 1998, but of surveyed countries in Figure 2-4, countries with a lower employment rate than Korea (2009) are Hungary, Slovakia, Czech Republic, and Japan (2005). The employment rate of mothers with 3 to 5 year old children remained between 35% and 40% over the same period and recorded 39.2% in 2009, the lowest level following Turkey and Malta.

Figure 2-3. Employment Rate of Mothers with Young Children (1998~2009, based on the youngest)



Note: Estimated by author using the 1st~12th Korean Labor & Income Panel Study
Source: Korea Labor Institute

Figure 2-4. Employment Rate of Mothers with Young Children By Country (1998~2009, based on the youngest)



Note: Figure for Korea is estimated by author using the 1st~12th Korean Labor & Income Panel Study. Data of Chile (2010), Sweden (2007), Switzerland (2006), Japan (2005), US (2005), Iceland (2002), Canada (2001), and Denmark (1999) are used. As for Israel, the employment rate of women with children aged between 0~1 yrs and 2~4 yrs are used, and as for Australia and Iceland, the employment rate of women with the youngest child aged less than 5 yrs.

Source: OECD Family Database(www.oecd.org/social/family/database); Korea Labor Institute.

The child rearing burden not only causes women's career interruption but also hampers the improvement in labor productivity, leading to aggravating labor quality as well as quantity. Also, in the period of career interruption, the investment in human capital decreases and the previously accumulated human capital diminishes, due to which it is inevitable that the productivity of women who had left the labor market will decrease.

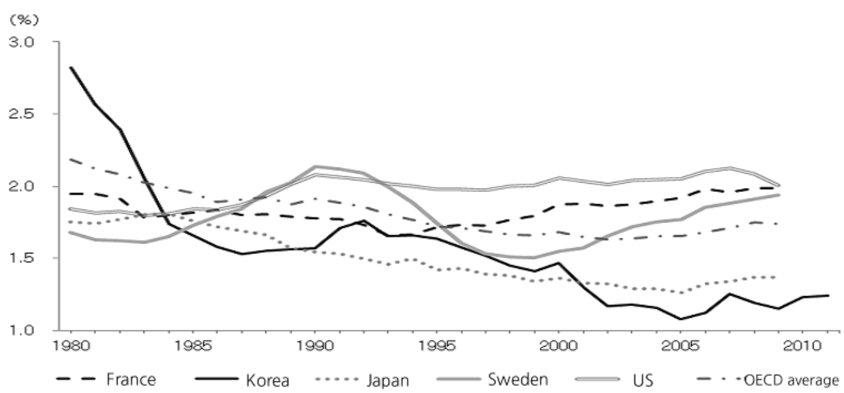
Korea has chronically experienced women's career interruption due to child rearing, but the population aging has raised the urgent need to increase the quantity and quality of the labor force by sustaining women's careers. As of 2010, Korea's population of those aged 65 or older accounts for 11% of the total population, lower than the OECD average of 15%. However, since its entry to the aging society (where 7% of the total population is aged 65 or older) in 2000, Korea is expected to become an aged-society (where 14% is aged 65 or older) in 2018 and a super-aged society (where 20% is aged 65 or older) in 2026. When the population grows old and the working-age population decreases, this could increase the government expenditure on the elderly such as pension and health services and decrease its revenue, eventually undermining fiscal prudence. Also, this could result in the fall in labor input and productivity, slowing the pace of economic growth (Youngsun Koh, 2011). In this respect, maintaining the quantity of the female labor force and preventing its quality from deteriorating through securing the continuance of their career could serve as an effective responsive strategy in terms of securing revenue and sustaining economic growth.

Above all, women raising children cannot continue their career without supports from child care policy. Upgrading the quality of child care services and easing working mothers' burden of child-rearing expenses could be an effective policy method that help women keep their jobs. When child care service quality is enhanced and therefore increases the substitutability between direct home care and facility care, women who put higher emphasis on the effects of child education could participate in economic activities without risking large opportunity cost. Moreover, child care subsidy is deemed desirable in the sense that it could lessen the financial burden and serve as an incentive for women to work more actively. Preceding studies show that there has consistently been a negative casual relationship between the child-rearing expense and the women's employment probability. In the US, when the policy to reduce child care costs was adopted, the employment of women--beneficiary of this policy--is found to indeed increase (Blau and Hagy[1998], Ribar[1995], Tekin[2004], Blau and Tekin[2006], Gelbach[2002], Meyers et al.[2002]). This is because as the child care costs decrease, thereby resulting in more cases of women receiving higher pay than reservation wage, labor market participation brings out higher utility.

Section 3. Increase in Fertility Rate

Increasing the fertility rate has been one of the key goals of Korea's child care policy. Korea's fertility rate recorded 4.53 in 1970, went down to 2.06 in 1983 (lower than 2.1, the population replacement level), and then to the record lowest 1.08 in 2005. The figure rose to 1.15 in 2009, but has been among the lowest in the OECD since 2002 (Figure 2-5). With a rapid increase in population aging and accordingly growing need for fostering a new workforce, the government has made efforts to improve the incentives to give birth through child care policy as well as work-family balance policy. For the child care sector, the burden of child-rearing expenses and the shortage of high quality child care services are found to be the main reason behind low fertility rates. Recognizing this, the government has taken gradual steps to expand the amount and intended targets of child care subsidy, to introduce home care allowance, to disclose the information on facilities, and to strengthen the monitoring on facilities (Government of Republic of Korea, 2008).

Figure 2-5. Fertility Rates of Major OECD Nations (1981~2011)



Source: OECD Family Database(www.oecd.org/social/family/database).

Child care subsidy provision and the policy to upgrade the quality of child care services are designed to reduce the cost of giving birth and thereby to weaken the avoidance of childbirth. According to Walker (1995), childbirth expenses are categorized into direct child-rearing expense, the loss of earned income due to career interruption, and the reduced income due to worn-out human capital in the career interruption period when the mother returns to the labor market. Child care subsidy may not only reduce direct child-rearing expenses but also prevent women from leaving the labor market due to the child rearing burden. The effect of home care allowance is to supplement the child-rearing expenses while decreasing women's incentive to participate market work. Meanwhile, high quality child care services help the health and development of children in the facility and therefore reduce women’s opportunity cost of economic activities, meaning that women find it easier to return to the labor market after giving birth.

3. Current Status of Child Care Policy

Section 1. Current Status of Child Care Center and Government Support

Child care centers are categorized into the following seven types according to the founder/operator: National/public, social welfare corporation, corporate/group, workplace-based, in-home, private, parent collaborate facilities. The description of each center is as follows.

Table 3-1. Description of Child Care Centers

Child Care Center by Type	Description
National /Public	run or operated by the government or local authority with the exclusion of workplace-based child care centers.
Social welfare corporate	established and operated by social welfare corporate, according to the Social Welfare Services Act
Corporate /group	established and operated by non-profit corporate or groups, excluding social welfare corporate

Workplace-based	established and operated jointly or independently by employer in the workplace or in the vicinity of the workplace and the high density residential area for employees (including child care centers established and operated by the government or heads of local authority for their government officials)
In-home	established and operated by an individual at home or place equivalent to home.
Private	Facility other than national/public, social welfare corporate, corporate/group, workplace-based, in-home and parent collaborate facilities
Parent collaborate	Established and operated by an association of 15 guardians or more.

Source: Ministry of Health and Welfare (2012).

The status of child care centers by type shows that among 41,803 facilities, in-home child care centers account for 53.5% (22.359) and private child care centers account for 34.3% (14,340), totaled 87.8%. The remaining 12.2% are those run by social welfare corporation and corporate/groups (2,324 or 5.6%), national/public sector (2,174, 5.2%), workplace-based facility (500, 1.2%), and parent collaboration (106, 0.3%) (Table 3-2). Unless categorized and mentioned otherwise in this study, social welfare corporation and corporate/groups are collectively referred to as corporate child care centers, while in-home and private facilities as private child care centers.

Table 3-2 Current Status of Child Care Centers by Type (Based on August 2012)

	Total	National/public	Social welfare corporate	Corporate /group etc.	Workplace-based	In-home	Private	Parent collaborate
Number	41,803	2,174	1,448	876	500	22,359	14,340	106
(%)	(100.0)	(5.2)	(3.5)	(2.1)	(1.2)	(53.5)	(34.3)	(0.3)

Source: I-Sarang Childcare Web Portal (www.childcare.go.kr).

Government supports for child care centers are provided in different ways according to the type of facility. National/public, corporate and workplace-based child care centers are subsidized with a certain percentage or amount of wage of their child care teachers every month, whereas in-home, private and parent collaboration child care centers are given monthly basic subsidy per registered child. The basic subsidy is 361,000 won for less than 1 year olds, 174,000 won for 1 year olds, and 115,000 won for 2 year olds per month. And, in return for getting wage subsidy, national/public, corporate and workplace-based child care centers must pay their employees a seniority-based wage according to ‘the wage payment standard for child care teachers,’ and centers are not allowed to charge more than the amount of subsidy given to parents by government. In-home, private and parent collaboration child care centers must pay their teachers more than the minimum wage, and should charge child care costs for less than 2 year olds within the scope of parents’ child care subsidy unit price and that for 3 to 5 year olds within the limit determined by the head of city or province (Table 3-3). Other than child care costs, child care centers are allowed to charge parents additional necessary fees for enrollment, special activities, field trips, shuttle transportation, events, meals, etc. within the scope and period set by the head of city or province.

Also, the central government and local authority provide child care teachers with benefits for improved treatment and working conditions. Since March 2012, the central government has provided child care teachers with 50,000 won every month under the name of working condition improvement. Teachers teaching the Nuri Curriculum for children aged 5 are paid 300,000 won every month of extra pay, instead of the benefits for working condition improvement (Ministry of Health and Welfare, 2012). From March 2013, teachers in charge of children aged less than 2 years old will receive an increased extra pay of 100,000 won every month, and with the launch of the Nuri Curriculum for children aged 3 and 4 years old, teachers in charge of this group will also be paid the extra pay of 300,000 won every month (Press release by the Ministry of Health and Welfare on Sept. 21, 2012). Meanwhile, local authorities pay child care teachers separate benefits for working condition improvement, and the amount varies according to local authority and the type of child care center.

Table 3-3. Main Supports, Child Care Teacher Wage and Child Care Fee Ceiling by Facility Type

	National/public	Social welfare corporate · Corporate /Group etc.	Workplace-based	In-home	Private	Parent collaborate
Main government support	30~80% of wages for executive director and teachers		Monthly 800,000 won for executive director, child care teachers, kitchen employees (Monthly 1,000,000 won for SMEs)	Subsidizes Basic Child Care Fees according to the number of enrolled infants and toddlers at center 0 yrs: 361,000 won 1 yrs: 174,000 won 2 yrs: 115,000 won		
Wages of executive director, child care teachers, kitchen employees	Seniority-based			At their discretion above the level of the minimum wage		
Upper limits of child care subsidy	Same as the child care subsidy assisting the parents			Child care subsidy for those aged between 0~2 yrs is the same with the one assisting the parents, while that for those aged between 3~5 yrs is determined by local authority		

Note: Workplace-based child care centers are given considerable supports from the Ministry of Employment and Labor, such as facility equipment and teaching materials and tools other than the wage of child care teachers.

Source: Ministry of Health and Welfare (2012).

Section 2. Current Status of Child Care Center Use and Supports for Young Children

The use of a child care center varies according to the age of young children (infants, toddlers and preschoolers). Based on figures from August 2012, the use of a child care center rises continuously until 2 years of age from 31.7% (0 yrs) to 62.3% (1 yrs), and to 82.5% (2 yrs), and then decreases afterwards (toddlers) to 58.4% (3 yrs), 40.8% (4 yrs) and 31.8% (5 yrs). The reason of such low use of a child care center by preschoolers is that as children grow older, they are more likely to go to kindergarten.

Table 3-4. Use of Child Care Center by Age Group (Based on August 2012)

(Unit: persons (%))

Age	Registered population (A)	Number of enrolled young children by facility type								Ratio of facility use (B/A (%))
		National/public	Social welfare corporate	Corporate /group etc.	Workplace-based	In-home	Private	Parent collaborate	Total (B)	
Infants and toddlers (aged 0-2)	1,390,705	52,270 (6.4)	42,131 (5.1)	17,503 (2.1)	12,503 (1.5)	344,753 (42.1)	349,498 (42.6)	1,084 (0.1)	819,742 (100.0)	58.9
0yrs	451,449	3,159 (2.2)	2,753 (1.9)	1,033 (0.7)	1,022 (0.7)	101,624 (71.1)	33,342 (23.3)	95 (0.1)	143,028 (100.0)	31.7
1yrs	486,420	17,816 (5.9)	14,131 (4.7)	5,859 (1.9)	4,836 (1.6)	143,165 (47.2)	116,996 (38.6)	329 (0.1)	303,132 (100.0)	62.3
2yrs	452,836	31,295 (8.4)	25,247 (6.8)	10,611 (2.8)	6,645 (1.8)	99,964 (26.8)	199,160 (53.3)	660 (0.2)	373,582 (100.0)	82.5
Preschoolers (aged 3-5)	1,410,626	94,333 (15.4)	66,854 (10.9)	31,898 (5.2)	16,279 (2.7)	7,243 (1.2)	393,867 (64.3)	1,657 (0.3)	612,131 (100.0)	43.4
3yrs	452,426	33,735 (12.8)	26,065 (9.9)	12,018 (4.5)	7,033 (2.7)	5,454 (2.1)	179,246 (67.9)	608 (0.2)	264,159 (100.0)	58.4
4yrs	484,026	32,583 (16.5)	22,343 (11.3)	11,024 (5.6)	5,588 (2.8)	1,087 (0.6)	124,211 (62.9)	549 (0.3)	197,385 (100.0)	40.8
5yrs	474,174	28,015 (18.6)	18,446 (12.2)	8,856 (5.9)	3,658 (2.4)	702 (0.5)	90,410 (60.0)	500 (0.3)	150,587 (100.0)	31.8
Young childern (aged 0-5)	2,801,331	146,603 (10.2)	108,985 (7.6)	49,401 (3.5)	28,782 (2.0)	351,996 (24.6)	743,365 (51.9)	2,741 (0.2)	1,431,873 (100.0)	51.1

Source: I-Sarang Childcare Web Portal (www.childcare.go.kr).

Statistics of Registered Population (http://rcps.egov.go.kr:8081/jsp/stat/ppl_stat_jf.jsp).

By the type of child care center, among the total number of young children using a child care center, 51.9% are registered in private, 24.6% in in-home, 11.1% in corporate, 10.2% in national/public child care centers, while the remaining 2.2% is registered in workplace-based and parent collaboration facilities. In particular, in-home child care centers account for more than a half of the total number of child care facilities, but is restricted by the per-facility quota of 20 children, so that the number of children using in-home child care centers only accounts for a fourth of the total number of children registered in a child care center. However, when subdividing the number of children using a facility by age group, most of those aged between 0 and 1 year old use in-home child care centers.

Regarding supports for young children (infants, toddlers and preschoolers), infants (aged 0) and toddlers (aged 1~2) from low-income households are given child care subsidy or home care allowance according to whether they use a facility or not. On the other hand, infants and toddlers from high-income households and preschoolers are entitled to child-rearing supports in the form of child care subsidy, only if they are registered in a facility.

As of 2012, a full-day child care subsidy is being provided to infants and toddlers (aged 0~2) and 5-year old children (Mon.~Fri.:07:30~19:30, Sat: 07:30~15:30), and children aged between 3 and 4 years old from the bottom 70% of the income bracket are given a full-day child care subsidy. Monthly child care subsidy is 394,000 won (0 yrs), 347,000 won (1 yrs), 286,000 won (2 yrs), 197,000 won (3 yrs), 177,000 won (4 yrs), and 200,000 won (5 yrs) (Table 3-5). As shown in Table 3-3 and 3-5, combining child care subsidy and basic subsidy, a total of monthly subsidy given to children aged between 0 and 2 years old is 755,000 won, 521,000 won, and 401,000 won, respectively. With the introduction of Nuri Curriculum to children aged 5 years old in 2012 and the decision to apply the curriculum to children aged between 3 and 4 years old starting 2013, a total of monthly supports for preschoolers aged 3 to 5 years is expected to rise every year from 220,000 won in 2013 to 240,000 won in 2014, 270,000 won in 2015, and 300,000 won in 2016, according to a press release by the Ministry of Health and Welfare (Jan. 18, 2012). Nuri Curriculum is a national, common curriculum for child care and education designed to provide quality child care and education under the government administration by unifying the standardized child care curriculum and the national curriculum for kindergarten.

Home care allowance is provided to infants and toddlers (aged 0~2) from households in the bottom 15% of the income bracket on a sliding scale from 100,000 won to 200,000 won every month according to the age of children (Table 3-6).

The government has revised child care policy twice in 2012 alone (January and September), but it is hard to predict what will happen to the subsidy system right next year before anything is decided in the National Assembly.

Table 3-5. Child Care Subsidy Amount and Target by Age Group (2011~2012)

			Coverage of child care subsidy	
		Child care subsidy per month (based on a full-day subsidy)	**2011**	**2012**
Infants and Toddlers	0 yrs	394,000 won	Households in the bottom 70% income bracket	All classes
	1 yrs	347,000 won		
	2 yrs	286,000 won		
Preschoolers	3 yrs	197,000 won		Households in the bottom 70% income brackets
	4 yrs	177,000 won		
	5 yrs	200,000 won		All classes

Source: Ministry of Health and Welfare (2011b); Ministry of Health and Welfare (2012)

Table 3-6. Home Care Allowance Amount and Target by Age Group (2011~2012)

Age	**Home care allowance per month**	**Coverage of home care allowance**
		2011, 2012

0 yrs	Younger than 12 months old: 200,000 won	Households in the bottom 15% income bracket
1 yrs	Younger than 24 months old: 150,000 won	
2 yrs	Younger than 36 months old: 100,000 won	

Source: Ministry of Health and Welfare (2011b); Ministry of Health and Welfare (2012)

As of the end of 2011, the decision on universal child care subsidy for children aged 0~2 years old and 5 years old triggered strong demand for the same treatment for children between 3~4 years old regardless of income class. The decision also faced intense criticism that the imbalance of support amount and target of child care subsidy and home care allowance could seriously encroach on parents' right to choose between facility and direct care. Reflecting such resistance, the government released a revised plan in January, according to which the provision of home care allowance for children aged 0~2 years old is expanded to the bottom 70% of the income bracket from the bottom 15%, while the bottom 15% is provided with a different amount of allowance on a sliding scale according to the age of children--the same as the previous policy--and those between the bottom 15% and 70% are provided with 100,000 won regardless of income class. Then, universal support for preschoolers was initially scheduled to expand its coverage gradually from 5 years old (2012) to 4 years old (2013) and 3 years old (2014), but now the government is made to provide all preschoolers with a full-day child care subsidy.

Table 3-7. Proposed Revisions of Child Care Subsidy System for 2013 (January and September 2012)

<A. Proposed Revision in January 2012>

Coverage	**0~2 yrs**		**3~5 yrs**	
	Home-based child care	**Facility child care**	**Home-based child care**	**Facility child care**
Households in the bottom 70% income bracket	Home care allowance	A full-day child care subsidy is given	-	A full-day child care subsidy is given
Households in the top 30% income bracket	-		-	

Source: Ministerial joint press release, 'Introduction of Nuri Curriculum to children aged 3~4 yrs and a large increase in home care allowance for children aged 0~2 yrs' (Jan. 18, 2012)

<B. Proposed Revision in September 2012>

<table>
<tr><th>Coverage</th><th colspan="3">0~2 yrs</th><th colspan="2">3~5 yrs</th></tr>
<tr><th rowspan="2"></th><th rowspan="2">Home-based child care</th><th colspan="2">Facility child care</th><th rowspan="2">Home-based child care</th><th rowspan="2">Facility child care</th></tr>
<tr><th>Full-time mother</th><th>Double-income households</th></tr>
<tr><td>Households in the bottom 70% income bracket</td><td>Home care allowance +

Part-time temporary care service</td><td>Child care fees =

home care subsidy + voucher for half-day child care subsidy</td><td>Child care fees=

home care subsidy +

voucher for full-day child care subsidy</td><td>Home care subsidy</td><td rowspan="2">A full-day child care subsidy</td></tr>
<tr><td>Households in the top 30% income bracket%</td><td>Part-time temporary care service</td><td>voucher for half-day child care subsidy</td><td>voucher for full-day child care subsidy</td><td>-</td></tr>
</table>

Note: A full-time mother who attend vocational training programs or schools is considered as incapable of caring children for reasons of child birth, illness and need for caring is provided with a full-day child care subsidy. Parent with infants or toddlers who wish to use child care center for more time than subsidized hours, parents should pay for extra fees.

Sources: Press release by the Ministry of Health and Welfare, 'Planning a full-scale revision of child-rearing support system for real consumers' (Sep. 21, 2012).

Meanwhile, as the number of facility-registered infants and toddlers exceeded the government’s expectation by far and hence the child care budget was set to be depleted before the end of the year, this resulted in a consensus that the provision of universal child care subsidy cannot be sustained. Then, the government released another revision in September, according to which some are returned to pre-2012 and others are entirely new, compared to the January revision which can be seen as a simple expansion of policy direction.

Table 3-8. Supporting Plan for Home Care Allowance and Subsidy for 2013 (January, September 2012)

<table>
<tr><th rowspan="2">Age</th><th rowspan="2">Support per month</th><th>Home care allowance</th><th>Home care subsidy</th></tr>
<tr><th>2013 Plan (Revision proposed in Jan. 2012)</th><th>2013 Plan (Revision proposed in Sep. 2012)</th></tr>
<tr><td>0 yrs</td><td>Younger than 12 months old: 200,000 won</td><td rowspan="3">Households in the bottom 15% income bracket

* All children, regardless of age, from households in the bottom 15~70% income bracket are provided with 100,000 won.</td><td rowspan="4">Households in the bottom 70% income bracket</td></tr>
<tr><td>1 yrs</td><td>Younger than 24 months old: 150,000 won</td></tr>
<tr><td>2 yrs</td><td>Younger than 36 months old: 100,000 won</td></tr>
<tr><td>3~5 yrs</td><td>100,000 won</td><td>-</td></tr>
</table>

Source Ministerial joint press release, 'Introduction of Nuri Curriculum to children aged 3~4 yrs and a large increase in home care allowance for children aged 0~2 yrs' (Jan. 18, 2012); Press release by the Ministry of Health and Welfare, 'Planning a full-scale revision of child-rearing support system for real consumers' (Sep. 21, 2012).

The revision in September newly included home care subsidy which is given to infants and toddlers in the bottom 70% income bracket on a sliding scale from 100,000 won to 200,000 won every month regardless of using a child care center. Also, preschoolers who belong to the bottom 70% income bracket and do not use a child care center will be given 100,000 won every month. The child care subsidy for infants and toddlers will be provided on a sliding scale of income, the same as the previous policy, with the exception that subsidy hours will be applied differently according to the mother’s employment status. For households in the bottom 70% income bracket, a full-time mother is provided with home care subsidy and voucher for half-day child care subsidy, whereas a double-income household is provided with the amount of the sum of home care subsidy and voucher for a full-day child care subsidy. The child care subsidy here is the sum of existing basic subsidy and voucher for child care subsidy. For households in the top 30% income bracket, a full-time mother is only provided with a half-day voucher, whereas a double-income household is only provided with a full-day voucher. When parents wish to use a child care center for more time than subsidized hours, parents should pay the extra fees. On the other hand, the policy regarding child care subsidy for preschoolers has not been revised, and as in the

January revision, a full-day child care subsidy is provided to all preschoolers regardless of income class. Specific amounts and hours for full-day, half-day or temporary child care have not been determined yet (Table 3-7-B, 3-8).

Section 3. Quality Management for Child Care Center

1) Limit on the number of licensed child care centers

Only licensed child care centers are allowed to open. The heads of local authorities shall release information regarding location conditions and required criteria for facility establishment in advance to persons seeking to open child care centers. Then, after ensuring that the concerned facility complies with all relevant laws, the head of the local authority shall grant a license. Aside from this, heads of local authorities have the right to limit the number of licensed corporate and private child care centers in the region where the quota of child care centers exceeds the demand for child care or current number of registered children, after conducting an analysis on supply and demand status of child care centers. The demand for child care here is calculated by multiplying the number of young children aged less than 6 years in the region and the proportion of children who are currently using child care centers or want to use them later (the ratio of demand for child care).

According to the 2011 status of limited license of child care centers, of the total 230 regions (city, gun and gu), 53 regions (23.0%) are found to allow licenses, while 177 regions (76.9%) are found to issue a full or partial limit (Moon-hee Suh et al. 2011).

2) Guidance and monitoring

The head of local authority shall provide guidance and monitoring so that founder/operator and teaching staff of child care centers comply with the Child Care Act and business guidance. To that end, a monitoring task force comprised of government workers working in the relevant field, experts from relevant offices such as public health centers, parents, and members of child care center steering committee is allowed to provide guidance and monitoring of the overall operation of child care centers. Also, the subject of guidance and monitoring may be changed in some parts, when the head of local authority deems necessary considering conditions of child care service in the region. Other than regular guidance and monitoring, child care centers are also subject to guidance and monitoring without being given prior notice, in the case of being involved in troubles including civil complaints or negative media reports, and must actively and cooperatively comply with the guidance and monitoring conducted by the Ministry of Health and Welfare and local authority as to specific issues (fraud relating to child care subsidy, meal, hygiene, safety, etc.) or specific facilities selected in advance by prior monitoring.

3) Accreditation

The government has established a quality management system on child care services and implemented the accreditation for child care centers so that consumers are able to choose a facility based on the information as to the quality of child care centers. Any child care center which get out of administrative disposition as of the deadline of accreditation application is entitled to apply for accreditation, and will receive the result after a series of procedures, including self-inspection, on-site observation, and deliberation. In the phase of self-inspection, the applicant shall be given confirmation of facility quota, required accounting documents, subscription to mandatory insurances, criteria for child care center installment, child care teachers placement, etc. from the local authority. Indicators for on-site observation consists of detailed fields of child care environments, operation management, child care curriculum, interaction and teaching methodology, health and nutrition, safety, etc. In the case of failure to obtain accreditation, reapplication is allowed (Ministry of Health and Welfare, 2012).

As of August 2012, 60.0% of the entire child care centers have obtained the accreditation with the largest number in national/public child care centers, followed by social welfare corporate, corporate/group, private, in-home, workplace-based and parent collaboration child care centers (Table 3-9).

Table 3-9. Current Status of Accreditation by Facility Type (As of August 2012)

(Unit: Number, %)

	Total	**National/public**	**Social welfare corporate**	**Corporate /group etc.**	**Workplace-based**	**In-home**	**Private**	**Parent collaborate**
Number	41,803	2,174	1,448	876	500	22,359	14,340	106
Accredited Child Care Centers (% of the total)	24,964 (60.0)	1,926 (88.6)	1,236 (85.4)	653 (74.5)	261 (52.2)	12,313 (55.1)	8,536 (59.5)	39 (36.8)

Source: I-Sarang Childcare Web Portal (www.childcare.go.kr).

4) Future Plan

Following the step to expand the quantity of child care supports, the government released another plan in March 2012 to strengthen the monitoring and information disclosure of child care centers as an effort to upgrade the quality of child care services. Starting the first half of 2012, the ex-post monitoring on accreditation has already begun, and by the end of 2012, the information on child care centers, such as administrative dispositions, fees on special activities, accounting statements, etc. will be available to the public, and the measure to increase the parents' participation in the accreditation procedure will be implemented as a pilot project. Starting 2013, it will be mandatory to release the details of results from accreditation procedures, such as total and respective scores of assessment for accreditation, and these results will be connected to financial supports for the concerned facility. In addition, parents will soon have the legal right to participate in the operation of child care centers, including child care and meal services, and child care teachers involved in child abuse, school meal-related scandals, subsidy embezzlement and other moral hazard cases, will be under strict restraints such as a ban on working in relevant fields or punitive penalty, and their personal information will be made public (Press release by Ministry of Health and Welfare, March 22, 2012)

4. Problems of Financial Supports for Child-rearing Expenses

Section 1. Excessive Focus on Reducing Child-rearing Expenses for Increasing Fertility Rate

Korea's child care policy has so far been focused on reducing parents' burden of raising children. On the background of the government's active steps to reduce child-rearing expenses lays the imminent concern over the problem that Korea is now entering the phase of low fertility rate and aging society at an unprecedentedly fast pace, hence the lack of new labor forces supporting the aged population. Now that the economic burden of child-rearing expenses is found to be the main reason behind giving up childbirth, financial supports for child-rearing expenses have been considered as an essential policy tool to increase the fertility rate (Sam-Sik Lee et al. 2005).

However, supporting households with child-rearing expenses is understood to be more effective in having their children at an earlier age than having more children (Grant et al. 2004; Gauthier, 2007; Thévenon, 2011). Gauthier and Hatzius (1997) show, using the data on 22 OECD nations between 1970 and 1990, that a 25% rise in a cash and in-kind transfer against the male average wage in the manufacturing industry leads to an increase in fertility rate only by 0.07. Ekert (1986) as well finds that France's cash supports in the late 1970s ended up with increasing the number of children only by 0.2 person, and even when the government provides full supports for child-rearing expenses, the number of children is estimated to rise by only 0.3 person (recited from Thévenon, 2011). Meanwhile, Barmby and Cigno (1990) show that using the UK's data on fertility, cash support for the first child turns out more effective in having the first child at an earlier age than having more children. Ermisch (1988) also finds that the UK's child benefits indeed serves to encourage having the first child earlier, but even after child benefits was doubled, the average number of children rose only by 0.17 person.

Such support also tends to reduce incentives for mothers to work, meaning that Korea, with its urgent need to use its idle workforce to prepare for population aging, should be very prudent as regards to supporting child-rearing expenses. Yoon-Young Cho (2006) shows that supporting child-rearing expenses regardless of the employment status of mothers may serve as an additional household income and therefore undermine incentives to enter the labor market, but when labor market participation is required as a prerequisite to receiving supports for child-rearing expenses, this turns out to not only increase labor supply but also expand tax base resources, hence the effect of partially offsetting the government's burden brought by the support. When France expanded the Allocation Parentale d'Éducation, or parental leave benefit, in the 1990s so as to cover more children, women's labor force participation dropped sharply, and this is the case that exemplifies the harmful consequence of the provision of universal child care supports. In 1985, the French government, with an intention to reduce the high unemployment rate, started to provide families with three or more children with parental leave benefits for a maximum two years when either mother or father is laid off and the youngest child is less than 3 years old. When the unemployment rate increased again in 1994, parental education benefits was given to families with two or more children, when either of parents stop working. Afterwards, the labor force participation rate of women who were newly entitled to this benefit fell sharply to 53% in 1998 from 69% in 1994 (White[2009], Fagnani and Math[2009]). Women who left the labor market at that time were mostly a low-skilled and low-income labor force, meaning that the extended coverage of the parental leave benefits resulted in widening the income gap between households (Fagnanz[1998]). The background of France adopting supports for child-rearing expenses was different from the situation faced by Korea, and there was also room for controversy with the legitimacy of policy direction in the sense that the policy reinforced the gender division of labor particularly in the low-income household.

Moreover, recent family policy in foreign countries is leaning more to the compatibility of work and family life than to financial supports for child-rearing expenses in their efforts to increase women's labor force participation and the fertility rate. Western European countries, in favor of the male breadwinner model in which the male is responsible for family livelihood and female for child rearing and household chores, had adopted child benefits in the 1930s. Afterwards, as women became increasingly more educated and better paid, more and more women decided to delay or give up marriage and having their first child due to the increasing opportunity cost of leaving their career. It was also then when a strong social demand based on the gender equality perspective was raised for the right for women to work to enable women to pursue their own economic independence. As a result, the main stance of family policy since the 1970s has shifted from simply giving cash to providing women with supports for the compatibility of child rearing and economic activities, such as maternal and parental leave, more number of child care facilities, and flexible working hours (McIntosh, 1986; Castles, 2003; Mcdonald, 2006). On the other hand, Northern European countries have long supported the dual-earner-dual-career model which is based on the assumption that when both parents work full-time and also equally participate in child rearing, this would promote gender equality and the child's development. Also, providing paid parental leave and quality public child care services has enhanced women's labor force participation rate and narrowed the educational gap between children from different social positions (Eydal and Rostgaard, 2011). Contrary to this, Southern

European countries adhered to traditional family values and remained reluctant to adopting family-friendly policy. Child-caring was mainly provided by family members or relatives, and women were considered more as one of family members or caregiver than as an independent earner (Hantrais, 1997).

Meanwhile, the policy for the work-family compatibility so far can be seen as being more focused on women's labor force participation, but from the 1990s, there came an international consensus that male participation in household chores and child care was desirable. Accordingly, increasingly more countries adopted the program of father's quota which reserves a part of the parental leave period for fathers while extending the period of maternity leave, strengthening child care services, and adopting parental leave or extending its period (Gauthier, 2005).

As a result of a growing number of countries reinforcing the policy for the work-family compatibility, the negative correlation between women's employment rate and fertility rate by country were changed to maintain the positive correlation since the late 1980s.

Section 2. Flat Supports without Considering Household Income and Women's Employment Status

1) Efficiency and Equality of Educational Resource Input

Child care subsidy for children in high-income households is considered inefficient due to its low return on inputs. It is of course true that regardless of income class, earlier investment in human capital will lead to higher return, but it should be noted that income class as well as the age serves as a factor in affecting the return on educational investment. Young children (infants, toddlers and preschoolers) in high-income households are more likely to be exposed to various educational opportunities, meaning that they are already given larger investment, which makes additional educational input towards them not very effective. Rather, in terms of fiscal management, it would be efficient to support young children from low-income households who lack safe caring or sufficient learning and guidance to lay the foundation to develop their capabilities later (Carneiro and Heckman, 2005; Wöβmann and Schütz, 2006).

Furthermore, supporting young children from low-income households is equitable in the sense that it serves to narrow the education gap between income classes. When a child is not sufficiently developed in the early childhood period, he or she will experience little multiplier effect, meaning continuous difficulties in catching up with subsequent curricula provided by compulsory education including elementary, middle and high schools. To put it another way, it is often the case that the education gap in the early childhood is gradually widening, as school curriculum becomes more challenging as the grade level goes up (Carneiro and Heckman, 2005).

Indeed, the government’s early intervention in young children in the vulnerable group is found to have positive effects in the long run, turning out to be highly cost effective. Good examples of successful early interventions are High/Scope Perry Preschool Program and Carolina Abecedarian Preschool Program. The former is a 1~2 year educational program designed to focus on developing cognitive ability of preschool children (aged between 3 and 4 years) who suffer delayed intellectual development and live with low-income and less-educated parents. The latter is to provide infants (0 yrs) in high-risk families with high quality caring and educational services for 5 to 8 years in order to promote their growth and learning. When calculating benefits of these two programs by summing social benefits such as the decrease in crime rate, expenses for vocational training and rehabilitation and welfare reliance and the increase in tax revenue and individual benefits such as the increase in wage, the former program is estimated to gain 16.14 times benefit against the cost spent on a participant until reaching age 40, and the latter program is estimated to have 4.10 times benefit against the cost spent on a participant until reaching age 21 (Schweinhart et al. 2005; Masse and Barnett, 2002; Recited from Center on the Developing Child, 2007).

These two programs can be found to be in sharp contrast in the sense that the High/Scope Perry Preschool Program has the effect of raising the IQ temporarily, whereas the latter enabled a participant to maintain the improved IQ throughout the adult period. In other words, the latter served to develop non-cognitive ability as well as cognitive ability by intervening at an early age, whereas the former ended up only developing the participant's non-cognitive ability permanently by intervening at a slightly later age. This implies that an earlier intervention by the government in children in the vulnerable group could help develop various human capabilities of participating children, possibly closing further the education gap between income classes (Zigler et al. 2002b; Carneiro and Heckman, 2005).

Koreas' representative early intervention programs are Dream Start run by the Ministry of Health and Welfare and the Education Welfare Priority Support Project by the Ministry of Education, Science and Technology. They include both preschool and school children as their target for early intervention. Dream Start is a comprehensive children welfare policy which aims to promote all-round development of children and restore the family function by providing pregnant women and households with children aged 12 or younger residing in low-income high density areas with customized integration services covering health, welfare, child care, etc. (Ministry of Health and Welfare, 2011a). Meanwhile, the Education Welfare Priority Support Project is an integrated support program that provides preschool and school children (elementary, middle and high school students) from educationally vulnerable groups including low-income, multicultural, single-parent and North Korean defector families with extensive supports for academic achievements, including learning, cultural experience, psychological or emotional and welfare aid. (Bangran Ryu et al. 2011).

The number of participating young children has gradually been on the rise recently, but the scope of target children is still extremely limited. As of 2009, the number of infants and toddlers and preschoolers in the bottom 15% of income bracket or poorer households than that is estimated to be 140,000 and 120,000, respectively with 3,582 (2.5%) infants and toddlers and 5,339 (4.5%) preschoolers receiving the benefits of the Dream Start project. Even when assuming that all 7,913 preschoolers, the beneficiaries of the Education Welfare Priority Support Project, are from the bottom 15% of income bracket, only 11.3% of low-income preschoolers are provided with early intervention services (Table 4-1).

Table 4-1. Number of Young Children Participating in Dream Start and Education Welfare Priority Support Project

(Unit: Persons)

Age	The bottom 15% of income bracket (2009) (% of age group)	Dream Start			Education Welfare Priority Support Project	
		2009	2010	2011	2009	2010
Pregnant mothers	-	250	497	531	-	-
Infants and Toddlers	144,063 (10.53)	3,582	4,339	5,642	-	-
Preschoolers	117,781 (8.35)	5,339	6,261	8,236	7,913	8,144

Note: The Education-Welfare Investment Priority Area Project has been renamed the Education Welfare Priority Support Project. The number of beneficiary preschoolers of the Education Welfare Priority Support Project for 2011 is not disclosed.

Source: The number of young children in the bottom 15% of income bracket is from Bong Ju Lee et al. (2009); the number of young children benefitted from the Dream Start project is obtained through the request to the Ministry of Health and Welfare; and the number of benefited young children of the Education-Welfare Investment Priority Area Project is from Bangran Ryu et al. (2011).

2) Women's Employment Status and Child Development

At present, the amount of child care subsidy is determined on a single scale of service hours--68 hours per week from Mon. through Fri. (12 hours) and Sat. (8 hours). However, it is necessary to take into account the development characteristics of young children (infants, toddlers and preschoolers) and to check whether this lengthy service is actually required by all young children. At the infant and toddler stage, building secure attachment with the main caregiver is the key process, since it is when the middle brain responsible for managing emotions develops at the fastest pace (Yoo-hun Suh, 2011). Attachment is an emotional relationship with a specific subject and can be developed stably only when the main caregiver with affection responds to the needs of the child sensitively and promptly (Waldfogel, 2006a). A child who develops secure attachment with the main caregiver can grow up as a person with self-esteem, curiosity, and other positive natures (Moon Hee Kang et al., 2011, Zigler et al.[2002a]). Also, daily play that a child shows interest in is known to be the most beneficial to brain development. This daily play includes any activities naturally incorporated by surrounding subjects such as paper, musical instruments, books, etc. (Yoo-hun Suh, 2011).

Meanwhile, at the preschooler stage, it is the prefrontal cortex that develops quickly. Therefore, education to promote the development of the prefrontal area should be provided sufficiently. The prefrontal cortex increases concentration by giving motivation, helps implement creative activities through detailed plans, and regulates morality and personality. In this regard, it is important to provide various experiences so as to develop imagination and thinking power and to teach etiquette and personality education to thereby develop the sense of caring, understanding and tolerance (Yoo-hun Suh, 2011). To stimulate a preschooler’s imagination and thinking power, it is important to provide them with sufficient access to learning tools and enough opportunities to explore them (No-Ui Kwak et al. 2007). These processes will enable preschoolers to develop teamwork by playing with peers, understand rules and accommodate differences between their own perspective and another's perspective. (Waldfogel[2006b], No-Ui

Kwak et al. 2007). At this stage, children's ability for spoken and written language develops rapidly, and to encourage the development of speech ability requires various activities by caregivers, including making interactive communications with children using abundant vocabulary and complicated sentences, allowing access to many and diverse vocabularies using stories, books and music, and encouraging drawing and writing activities in various ways so as to increase the familiarity with letters (No-Ui Kwak et al. 2007).

This stimulation needed for child development may be available at home to some degree, when mothers are on parental leave or not working and hence is able to directly take care of the child. In most cases, secure attachment and daily plays are available in ordinary home conditions, when the caregiver takes care of children with affection. In Sweden, women's employment status is a factor to be considered when deciding on hours for child care subsidy. Each local authority is responsible for reserving a space at a preschool when parents are at work, but in the case where either father or mother is not employed or on parental leave, most local authorities puts limitations on the use of preschool, such as 3 hours a day or 15 hours a week (Skolverket, 2007). For preschoolers to develop creativity and social skills, it is essential to expose them to educational experiences and communication with others. Speech as well is something that is learned in the social context, and hence more contacts with peers are likely to lead to advanced speech ability (Moon Hee Kang et al. 2011). These experiences, however, are not offered only in standardized environments like facilities, but can be replaced by walks with parents, field trips and play with neighboring peers. Nuri Curriculum launched in 2012 consists of 3 to 5 hour-programs, not a whole day (12 hours) program. Preceding analysis on the UK data reveals no statistically significant difference in child development between the part-time and full-time use of child care centers (Melhuish, 2004).

Section 3. Insufficient Consideration of Adverse Effects of Home Care Allowance

There is currently a continued debate on equity issues due to a considerable amount gap and target difference between child care subsidy and home care allowance given to parents.

1) Relationship between child care subsidy and home care allowance

Rather than to achieve a balance between home care allowance and a flat child care subsidy, it is more desirable to first revise the current child care subsidy according to household income and women's employment status, and then based on the revised system of child care subsidy, to match targets of home care allowance and child care subsidy. As discussed earlier, it would be possible to achieve efficient fiscal management and equity between income classes at the same time by giving relatively more supports to low-income children and providing non-working mothers with a part time child care subsidy, than by offering a full-time child care subsidy to high-income children and non-working mothers. When these targets of improved child care subsidy are entitled to home care allowance, there would be no case of choosing facility care over direct care simply to get child care subsidy despite the belief that direct care would be more beneficial to children.

2) Home care allowance and women's labor force participation

Meanwhile, an increase in home care allowance should be decided carefully, given that it could reduce the incentive for women to work. Increased home care allowance raises non-labor income and then reservation wage, leading to less incentives to take part in economic activities. Besides, it is often the case that women have less-paid jobs than their spouses, hence low opportunity cost of career interruption, and also that women have a comparative advantage in household chores and child rearing influenced by the traditional gender division of labor. Therefore, there is a strong tendency that women are more likely to discontinue working when home care allowance is provided (Repo, 2010). If an increase in home care allowance prevents women from returning to work even after parental leave, human capital depreciation will worsen, causing income to rise slower. This would not only undermine the development and use of competent female labor forces, but also cause negative impacts on closing the wage gap between men and women (Nyberg, 2010).

Indeed, Finland witnessed the adoption of child home care allowance cause a fall in women's labor force participation (Ilmakunnas, 1997). The estimation by Ilmakunnas (1997) reveals that when the maximum child home care allowance is provided, women are 55% more likely to discontinue working and directly take care of their children, which is up by 20%p from the case of no allowance. Then, an increase of a seventh in allowance turns out to about a 3% increase in the likelihood of choosing direct child rearing without working.

Norway as well experienced a fall in female labor supply after the adoption of cash-for-childcare program. According to Rønsen (2009), this program resulted in a 6% increase in the likelihood that mothers with a child aged 1 to 2 years choose short-time working over full-day working in 1999, but showed few sign of discontinuing economic activities. On the contrary, as of 2002 after four years since the program started, there is no case of women reducing working hours, but there are 3% more cases of women leaving the labor market. In other words, these allowances tend to reduce working hours of working women in the short run, but could actually restrain the supply of female labor force in the long run, according to the analysis.

Furthermore, it is concerning that an increase in home care allowance would eventually serve to curb the labor supply of low-income and less-educated women in particular. Given low opportunity cost of career interruptions of women who are less paid now and expected to remain so even in later times, they are more likely to choose child care subsidy and direct child rearing over facility care, receiving home care allowance (Nyberg, 2010). The survey on working mothers using child care centers reveals that when home care allowance is given sufficiently, positive responses to direct child rearing without working are answered more by those in the bottom 15% of income bracket (51.5%) than by those above it (34.0%) (Hae-mi Yoo and Moon Jeong Kim, 2012).

Not only that, an increase in home care allowance could widen the income gap between classes, as low-income and less-educated women are more likely to leave the labor market. Korea showed an improvement in income inequality as GINI coefficients decreased between 2008 and 2010. This is considered to be attributable to that an increasing number of full-time housewives in low-income households entered the labor market (Ba-Wool Choi, 2012). An increase in home care allowance may weaken the incentives of these women to work, thereby deterring an improvement in income inequality.

3) Expansion of home care allowance and child development

There are ongoing discussions by politicians as to extending the target of home care allowance to the preschooler stage, but when low-income and less-educated women choose the allowance and raise their children in educationally poor environments, the education gap between income classes could be widened further. As mentioned earlier, the preschooler stage is when social skills and personality are developed through interactions with others, creative powers are built through diverse learning materials and tools, and speech and language abilities are enhanced by main caregiver’s command of language. A child at this stage who stayed at home without enough access to various learning stimulation and plays with peers might lag behind even before entering elementary school. Besides, given that the effect of educational inputs turns out differently depending on existing capabilities, the education gap between income classes is likely to widen further without strong early intervention by the government.

Section 4. Poor Effectiveness of Child Benefit

Some have argued for adopting child benefit, which however seems inappropriate to increase the fertility rate, encourage women's labor force participation and promote child development. It can be said that home care allowance is to target those who do not use facilities, whereas child benefit is to target those who meet eligibility requirement regardless of whether they use facilities or not. As shown above, simple cash assistance is more effective in giving birth at an earlier age than giving birth to more children, and child benefit may increase the reservation wage as in the case of home care allowance, leading to reducing the incentive for women to work. Child benefit may be considered necessary as a way to reduce the heavy burden of child-rearing expenses, but it would be more desirable to encourage parents to enter the labor market and to help them upgrade their skillfulness through employment counselling, job placement and educational training programs, which is more helpful in strengthening the fundamental self-reliance capability to raise children and also in increasing tax revenue.

Also, the education policy which has been the basis of increasing expenses of child rearing should be revised in ways as follows: that consumer-customized school curriculum is provided so as to satisfy various learning needs of students; entrance examination system puts higher focus on creativity and self-directed learning capability; and the demand for private education is absorbed by regular school curriculum (Hisam Kim, 2012).

Besides, it is hard to be sure that child benefit is strictly used to buy resources needed for health and education of children. There seem some labeling effects, with the benefit used to buy goods actually for children thanks to its name. Yet, some research shows that the spending pattern is found to be little different from that of other incomes or can even be spent on buying alcohol, according to Kooreman (2000), Edmonds (2002), Blow et al. (2012). Rather, Currie (1993) finds that in-kind and services assistance are more helpful for child development than cash support and that the effect could be maximized when benefits are targeted specifically on children (Currie, 1993).

5. Problems of Child Care Quality Management

Section 1. Weak Competition Basis between Facilities due to the Lack of Quality Information

1) Access to child care quality information and the level of child care quality

In reality, checking on the quality of child care services accurately is not an easy task for parents. It is almost always true that care service providers have more information as to the quality of their services than consumers. Such a condition of one party having more or better information than the other is referred to as information asymmetry in economics (Youngwhan Lee, 2005).

Through their survey, Moon-hee Suh and Woo-Jung Lee (2012) show that when it comes to deciding on a child care center, parents find it particularly difficult to get information on educational background, qualifications and academic major of facility executive director and teaching staff, disgraceful scandals such as abusive practices or violation in law, and protective services such as hygiene and health. And, the ways that parents use to gather information are mainly neighbors (40.8%), followed by visiting and counselling (33.3%). This indicates that main factors affecting parents' decision on selecting a care facility are acquaintances' subjective evaluation, parents' acceptance attitude towards the evaluation and parents' observation.

However, parents' evaluation on the quality of child care services may not be consistent with the quality result measured by actual experts. Mocan (2007) shows that as for the US, even after parents actually witnessed the quality of care services, they tend to overestimate or underestimate the quality, depending on their own characteristic nature and the channel of information sources, and therefore facility-parents information asymmetry is not rectified. The same may be true to the case of Korea. Under the condition that parents find it difficult even to monitor the facility's care environment and teachers' attitude on a regular basis, it is quite possible that parents' evaluation may be wrong (Walker, 1991).

When parents hold insufficient information on the care quality, incentives for service providers to provide high-quality care services are reduced, making the market full of low-quality care services. Since parents are unwilling to pay expensive prices for services where quality cannot be accurately evaluated, facilities would end up offering low-quality services that are available at cheaper charges due to lower production expenses, and not high-quality services, which cost a fortune to maintain and therefore have to be offered at higher prices. This is how a facility-parents information asymmetry leads parents to choose low-quality services over ideal high quality services, which is termed as adverse selection (Akerlof, 1970; Mocan, 2007). A good example is that private child care centers show no intention to raise the wage of their teaching staff to the level of those working in national/public or corporate facilities. Therefore, it is highly likely that child care teachers hired by these private facilities are poorly qualified with an exception of those who might be able to take pride in caring after young children even with low wages. Teachers who do not find it beneficial to teach young children and are also competitive enough to be highly paid may choose to seek a different workplace other than child care centers. Meanwhile, a lack of sufficient monitoring of facilities can cause moral hazard where children are fed expired foods or violently abused in conditions where parents are unable to watch. When adverse selection is seen as a phenomenon resulting from low productivity of child care centers entering the market, moral hazard can be seen as the result of service providers taking advantage of consumers' weakness in access to quality information by arbitrarily controlling the quality of their services (Walker, 1991).

Under such information asymmetry, the government's financial support paid to facility teachers for improved treatment does not necessarily mean that facilities hire competent teaching staff. Incentives are still insufficient for facilities to improve their services, and some even lower the wage of teachers by the amount supported by the government.

Fortunately, the government plans to strengthen the monitoring and information disclosure of facilities, which may serve as an incentive for them to upgrade their service quality. When these efforts by the government are carried out successfully and enables parents to accurately monitor the quality of care services, harmful consequences of information asymmetry will disappear and high-quality care services will be available through competition among facilities.

Some are concerned that as private child care centers seek profits, the quality of their care services could worsen, but when it is possible to filter out low quality services, facilities failing to meet the needs of parents will be driven out from the market. Accordingly, it is possible to expect facilities to engage in voluntary efforts to secure competent teachers by upgrading their treatment for teachers. Also, facility charges could be lowered overall since consumers are able to check service quality and may turn against facilities that charge high fees relative to service quality in comparison to other facilities. The opposite is of course possible. In the context of competition, when parents want services with higher quality than those available at current child care fees, facilities may increase their fees to reflect the rise in input expenses.

2) Types of child care center and satisfaction with quality

Parents tend to prefer national/public child care centers in particular over other types of facilities. This tendency seems to be due to the expectation that government-run facilities may be committed more to providing high-quality services in order to meet social necessities and needs than seeking profits (Shleifer, 1998). Meanwhile, since corporate child care centers may emphasize devotion, services and religious or educational faith in caring for young children, their overall service quality could be better than that of private child care centers. The fact that illegal practices and scandals involving the storage of expired foods or false registration of the number of children and teaching staff take place more often at private child care centers than at national/public and corporate centers seems to have partly strengthened the discriminative tendency of parents.

Using the 2009 National Survey on Current Status of Child Care, this study conducts the multiple linear regression analysis to identify differences of parents' satisfaction with facility environment and services according to the type of child care center (Table 5-1).
A total of 10 indicators are set as explained variables: executive director, teachers, surrounding environment, facility equipment/interior, teaching materials and tools, indoor atmosphere, health care, healthy meals and snacks, safety, and curriculum. Respondents are instructed to choose 1 for being satisfied above an average level or 0 for being unsatisfied.

Facility type, the key explanatory variable, is divided into national/public, corporate, private and workplace-based child care centers, among which private center is set as reference group. Parent collaborate facilities are excluded from the survey, since only 2 are observed among 1,183 facilities. Then, child's age and parents' characteristics are added as additional explanatory variables, since they are deemed to be related to the satisfaction with child care centers. Also, parents may have different quality priorities, depending on the age of child, which is therefore controlled in the analysis. Then, considering that households with better education, more income and higher spending on care services tend to apply stricter criteria to the quality of care service, explanatory variables are set to include educational background of mother, household income and monthly fee spent on facility. In addition, it may be true that working mothers may not be able to have enough time to look for a facility and therefore could be deemed generous with care service quality, but they are likely to spend more efforts and time to find a better facility in order to make up for the time they could not spend with their children. As a result, the employment status of the mother is excluded. Then, this analysis chooses two proxy variables that reflect parent's interest in care service quality: whether parents are aware of the standardized childcare curriculum and the accreditation and whether they are willing to join the parents' monitoring group. Lastly, city and province dummies are added as variables, which is to reflect differences in average satisfaction according to city and province.

Interestingly, in the indicators that could be easily observed, there is few difference in parents' satisfaction among national/public, corporate and private facilities, whereas in the indicators that could not be easily observed, parents' satisfaction with national/public and corporate facilities are found to higher than that with private facilities. In the case where explained variables can be checked promptly by visiting facilities, such as facility equipment/interior, teaching materials and tools, the analysis finds no relation between facility type and parents' satisfaction. On the other hand, as for indicators related to daily activities, such as indoor atmosphere, health care, healthy meals and snacks, and safety, parents who send their children to national/public and corporate facilities turn out to be more satisfied. Regarding the satisfaction with executive director and teaching staff, corporate facilities score the highest, which is probably a complex reflection of both relative easy and difficult aspects in checking out their educational background, working history, interaction with children and counselling attitude.

That fact that each type of facility shows different qualities is considered to be due to each having different degrees of service motivation or available profits for distribution under conditions where it is not easy to observe service quality. Since national/public facilities are altruistic and tend to seek satisfaction in increasing the quality or it is difficult for them to convert operational profits to their own private property, they have less incentives to pursue profits, which enables them to produce high-quality services in all indicators regardless of whether it is easily observed. On the other hand, private facilities are more likely to focus on seeking profits or an individual operator may be more free to decide on the use of profits. Therefore, their service quality may not differ much in easily observable indicators, compared to national/public and corporate facilities, whereas private facilities could provide low-quality services due to moral hazard in indicators that cannot be observed easily (Rose-Ackerman, 1996; Glaeser and Shleifer, 2001; Morris and Helburn, 2000).

Of course, all child care centers in Korea are a non-profit organization in principle, and any surplus is required to be used to pay increased wage and bonus to teachers, to buy teaching materials and tools and to improve the facility environment (Ministry of Health and Welfare, 2012).

Realistically speaking, however, unlike private facilities, operators of national/public and corporate facilities are paid by salary grade and are likely to be more influenced by educational philosophy and religious faith rather than profit seeking. Therefore, national/public and corporate facilities are, on average, under stricter restriction of private distribution of profits, compared to private facilities.

The above analysis results re-emphasize that strengthening the monitoring and information disclosure of facilities are essential to closing the quality gap between different types of facilities. In their study of US cases, Morris and Helburn (2000) use the scores of child care quality given by experts and find that except for the states with insufficient quality regulations at the time of establishment, child care quality shows few difference between profit and non-profit organizations even when it comes to indicators that can not be observed easily. Also, Sundell (2000) finds that Swedish children attending profit and non-profit child care centers show no statistical difference in their development of cognitive and social/emotional capability, which is assumed to be attributable to profit facilities having higher incentives to comply with quality-related regulations, because only a profit facility that meets certain quality requirements is provided with the same financial supports given to public facilities.

Table 5-1. Analysis of Determinants to Satisfaction with Child Care Center by Quality Indicator

	Executive director	**Teacher**	**Surrounding environments**	**Facility equipment/interiors**	**Teaching materials and tools**	**Indoor atmosphere**	**Health care**	**Healthy meals and snacks**	**Safety**	**Curriculum**
National/public facility	-0.04	0.05	0.04	-0.00	0.00	0.04	0.09 **	0.12 ***	0.04	-0.02
	(0.04)	(0.04)	(0.05)	(0.04)	(0.05)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Corporate facility	0.08 **	0.11 ***	0.09 *	0.06	-0.05	0.12 ***	0.10 **	0.13 ***	0.09 **	0.09 *
	(0.04)	(0.04)	(0.05)	(0.05)	(0.05)	(0.04)	(0.05)	(0.04)	(0.04)	(0.04)
Workplace-base facility	0.01	0.06	-0.05	0.17	0.17	0.25 **	0.13	0.19 *	0.18 *	0.05
	(0.09)	(0.09)	(0.11)	(0.10)	(0.11)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)
Age of child	-0.03 ***	-0.03 ***	-0.04 ***	-0.02	0.01	-0.01	0.01	-0.02 *	-0.02 **	0.00
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Mother with high school education	0.02	0.05	0.03	-0.03	0.01	-0.08	-0.10	0.09	0.00	-0.17 *
	(0.08)	(0.08)	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)	(0.08)	(0.09)
Mother with university education	-0.04	0.04	-0.02	-0.07	0.00	-0.10	-0.11	0.05	-0.02	-0.14 *
	(0.08)	(0.08)	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)	(0.08)	(0.09)

Household income (1 mil. won)	-0.01	-0.00	0.01	-0.01	-0.02 *	-0.00	0.02 *	0.01	0.00	-0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Child care subsidy per month (10,000 won)	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00 ***	-0.00	-0.00 *	-0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Working mother	0.05 *	0.02	-0.03	0.05	0.06 *	0.07 **	0.10 ***	0.05	0.06 **	0.01
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Aware of standardized child care curriculum	0.03	0.04	0.06 *	0.15 ***	0.05	0.09 ***	0.06 **	0.04	0.11 ***	0.03
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Aware of accreditation	0.00	0.03	-0.02	-0.01	0.03	-0.03	-0.01	-0.00	0.00	0.05
	(0.03)	(0.03)	(0.04)	(0.04)	(0.04)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Willingness to participate in a monitoring group	-0.00	-0.02	-0.01	-0.00	-0.02	-0.01	-0.04	-0.05 *	-0.03	0.03
	(0.02)	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Observation valoue	1,181 facilities									

Note: * , **, *** indicate statistically significant at the 10% level, 5% level and 1% level, respectively; private child care centers as reference group are collectively referred as private child care center; other than variables reported in the above table, city and province dummies are additionally controlled.

Source: Calculated by author using the 2009 National Survey on Current Status of Child Care.

Meanwhile, in the case where consumers cannot be sure of service quality before purchasing, it is concerning that private suppliers, unlike publicly owner suppliers, tend to provide low-quality services in order to reduce expenses. However, Shleifer (1998) says that when consumers are allowed to choose another supplier when unsatisfied with purchased services and when reputations for service quality can be formulated, this would encourage the competition among facilities, which makes it impossible for private suppliers to cut back production costs at the expense of quality. Measuring qualities of child care services may still be difficult before and after purchasing services, and by the time the care service quality repuation is formulated, children in low-quality facilities are expected to have suffered inappropriate caring. For this reason, it can be said that market function alone is not enough to improve service quality efficiently. In this regard, the government's role in management, monitoring and release of relevant information is needed regarding both structural and procedural qualities on care services so that consumers can thoroughly check detailed information on child care service quality prior to purchasing services and the reputation of service quality can be spread within a short time.

Section 2. Limiting facility competition due to quantity regulations

Currently, heads of local authorities have the right to limit the number of licensed corporate and private child care centers when the quota of child care centers exceeds the demand for child care or current number of registered children. Limiting the number of licensed facilities when the supply of child care services exceeds demand seems to be driven from the concern that heated competition between facilities could worsen their financial conditions and degrade child care service quality. As a result it is young children who would fall victim to this process.

However, it should be noted that allowing the survival of low-quality child care centers in the market by limiting the entry of a new facility could serve as an obstacle to promoting the child's development and improving child care quality. Young children at facilities where the service quality is too poor to survive the competition may end up lagging behind in normal development. Moreover, when a facility falls out of the competition and suffers reduced profits, it is desirable that the facility should work to solve its poor management conditions by increasing the number of registered children through upgrading service quality, and that the government should offer detailed quality information so as to make it easy for young children to change facilities while creating environments to expand high-quality facilities.

It may be true of course that under the condition where available information on quality is limited, lifting the limit on the accreditation of private child care centers could lead to a rise in private child care centers whose quality is on average lower than national/public child care centers as mentioned above. However, if the monitoring and disclosure of information on child care centers are strengthened and consumers are able to check out the quality of care services, a quantity regulation may restrain the overall improvement of service quality by protecting the monopolistic power of existing child care centers. These existing child care centers which are no longer pressured by the burden of competition, backed by the quantity regulation, are guaranteed a certain number of enrolled children, which has left them unconcerned about falling behind even if they charge expensive care service fees or turn down parents' request, just as long as they comply with the law. Also, in the regions under restricted accreditation, new child care centers cannot be established, placing an excessive burden of foregift on those who wish to acquire a child care center. When they attempt to cut back operation costs so as to make up for the foregift paid, the quality of their child care services could deteriorate. Also, in order to continuously enjoy their monopolistic gains, existing child care centers are most likely to strongly oppose the government's action to enhance service quality.

6. Conclusion and Improvement Measures

This study attempts to understand multi-layered goals of child care policy and thoroughly analyze how effective child care policies, mentioned above, are to achieve policy goals. Considering Korea's pending situation of low fertility rate and population aging, this study suggests the following three issues as goals of Korea's child care policy: development of young children, acceleration of women's labor force participation and increase in fertility rate. Then, this study shows that current child care policy has limitations to fulfill each goal or purse them in a balanced way.

This chapter attempts to suggest improvement measures so as to optimize child care policies that best fit their goals. Then, it attempts to propose additional suggestions for the revised child care policy for 2013 in order to meet the objective of the optimized policy and to bring tangible outcomes in the future.

Above all, according to the income level of the household, child care subsidy and home care allowance needs to be provided on a differential scale. subsidized hours at child care centers need to be revised according to the employment status of the mother. It is necessary to provide lower income families with more child care subsidy so as to encourage the labor participation of women from low income families and also to reduce the educational gap between different income classes. It is also necessary to shorten the current full-day service at subsidized child care centers to a part-time service for the children of non-working mothers or mothers on maternity and parental leave.

In the case of infants and toddlers, those eligible for child care subsidy and home care allowance should be the same, while seeking a balance between the child home care allowance and the part-time child care subsidy given to non-working mothers or mothers on maternity and parental leave according to their income level. It has been known that infants and toddlers who are raised by caring and loving parents grow up well at home without facility care. In this regard, there should be no case where parents choose facility care only to get child care subsidy or for the reason that child care subsidy is larger than home care allowance, even when they regard the direct care of parents much more beneficial to the development of children. Any excessive increase in home care allowance must be restrained, considering that home care allowance could cause negative impacts such as weakening women's labor force participation and widening the income inequality. Instead, as a way to ensure equal educational opportunities between different social classes, it is desirable to provide customized integrated support services according to the different needs of vulnerable households with young children. In addition, when a number of similar projects relating to the needs of children, benefits, outcomes of support projects and many others are made to be managed comprehensively through a network, it will be possible to provide children in need with customized support in a timely and efficient manner. When the amount of child home care allowance is not enough and therefore limits the options of mothers preferring individual child care over facility care services, the child caregiver service could be provided on a differential scale according to the household's income level and employment status of the mother, as is done for child care subsidy. In the case grandparents or relatives want to be a caregiver, they will be entitled child caregiver only after they acquire relevant qualifications or complete educational training programs like the Child Care Benefit for Registered Care in Australia.

And, it would be appropriate that home care allowance be given to only infants and toddlers as it is today. Preschoolers, unlike infants or toddlers, develop their sociality and personality through play and relationships with others, foster their creativity using a variety of learning materials and means, and learn the language by imitating the words of the caregiver. When home care allowance is extended to include preschoolers, low-income and less-educated mothers who choose to receive the allowance may not be able to provide their children with sufficient learning stimulus and educational resources needed for the development of children.

Moreover, the government needs to enhance the care service quality by strengthening the information disclosure and monitoring of child care centers. When parents prefer high-quality child care services and are able to accurately discern the quality, facilities will naturally work to improve their service quality in order to draw more children. It is also essential to actively promote the importance of high-quality child care services in the development of children by distributing promotional booklets at public offices and hospitals for families planning to have children. Furthermore, it is important to pay keen attention to the management of various information on child care centers that could enable parents to differentiate excellent, high-quality care services using the detailed information. Such information includes ex-post monitoring on accreditation, public release of administrative dispositions, fees and other expenses, curriculum, teaching staff's academic and working background and qualifications, the total score of assessment for accreditation and respective score by each area, parents' monitoring group and the proper operation of standardized accounting management system for child care centers. Also, only when such information and comparison of evaluation criteria are easy to access will the effect of information disclosure be maximized. Among the quality evaluation criteria, the interaction between young children and care givers particularly needs constant monitoring by parents. Providing parents with simplified evaluation criteria formulated by experts—for example, those made by the US Child Care Resource and Referral Agencies—is another method to help closely look into the qualification of care-giving teachers. In order to maintain care service quality, it is also important to increase the number of personnel in charge of guidance and monitoring of child care centers and therefore update the information on the quality of care services on a frequent basis. In the case where the quality level expected by parents is overall at a low level or they show a preference for particular criteria on quality evaluation, providing the subsidy only to children at a qualified child care center which meets quality requirements to a certain extent would be another option to promote the overall quality improvement in child care services.

Once the system for child care subsidy and home care allowance is revised and detailed information on the quality of child care services is communicated to the public, restrictions on the number of child care centers should be removed. If license limits are deregulated under conditions where a full-day child care subsidy is generally and widely provided, this would result in the increase of new child care centers, hence allowing young children of non-working mothers or high income households--who were not able to use center services due to the shortage of facilities--to enroll in facilities for longer hours, free of charge. Providing young children of non-working mothers or those in high-income households--whose return on input of educational resources is low--with a full-day child care subsidy is considered inefficient in terms of fiscal management. A selective support for young children in low-income households are deemed proper in the sense that it ensures the equality of educational opportunities.

On the other hand, if restrictions on the number of facilities are removed without a full disclosure of care service quality information to prompt active competition between facilities, this could result in the increase in the number of private child care centers offering comparatively low quality services, leading to degrading the average quality level of child care services. In this regard, when regulations on the establishment of child care centers are eased after ensuring that the public has easy access to information on care service quality, this could encourage facilities to compete actively in order to secure more children at their centers by improving service quality and reducing expenses. Also, given that existing child care centers in guaranteed dominant positions used their excess profits to oppose the government's actions that could negatively impact their interests, removing the quantity regulation could result in the increase in the number of child care centers which focus on enhancing care services and reducing expenses in order to gain a competitive advantage. But, in order to ensure the healthy development of children, accreditation should be limited to child care centers which meet quality requirements regarding facility establishment, operation and care-giving teachers' qualification so that the high quality level of care services is guaranteed.

Operators of national/public child care centers are likely to enjoy personal satisfaction from offering high-quality child care services, or face limited opportunities to pursue personal profits. In this regard, when it is difficult to check the quality of care services, they are more likely to provide better quality services than private child care centers. However, when detailed quality information is made available, new high-quality facilities are approved and children can be transferred more easily, this could further stimulate competition among facilities to attract more children, resulting in improving the quality of private child care centers as their resource allocation becomes more effective than that of government-run public facilities. In this light, any increase in the number of public facilities would be better limited to rural areas where private facilities are rare and are not easily established on their own due to insufficient child care demand.

Another suggestion is that when facilities have better incentives to improve care service quality, they would hire competent care-giving teachers, leading to improvement in their qualification. Enhanced qualification of caregivers means a rise in wages and improvement in employment conditions brought by increased productivity. With little incentive for facilities to improve care service quality as there are today, facilities may attempt to reduce the wages of care-giving teachers based on the amount of government's financial support paid to teachers for improved treatment. Considering this possibility, the government needs to change the way of universal payment to care-giving teachers regardless of their productivity into allowing an autonomous wage system--under which wages and employment conditions are determined according to productivity of teachers--by putting financial resources for formulating conditions for competition through strengthened information disclosure and monitoring of facilities. If it turns out that the qualification of currently available care-giving teachers under competition that can be hired with the facility's budget is not high enough to promote the healthy development of young children, child care costs should be increased to enhance the wage and employment conditions of care-giving teachers. In this process, social discussions are needed to build consensus on how much of the burden parents need to shoulder for the increase in child care costs. To enhance the quality of care-giving teachers, strengthening their expertise needs to be emphasized at the beginning stages of child fostering.

These discussions now enable us to assess the revisions in child care policy released in January and September 2012. The revision in January carries a full-day care subsidy regardless of employment status of the mother (working or non-working) and household income level, which contradicts the key argument of this study to determine the amount and hours for day care subsidy on a differential scale. On the other hand, the comparison between proposed revisions in January and September reveals a number of consistencies in terms of intention and effects of policy, meaning that both have been improved greatly compared to the previous child care support system. Among others, children aged 0 to 2 years old are now entitled to full-day and half-day care services depending on whether the mother is working or non-working and are given child care subsidy on a differential scale according to household income. Full-time mothers and dual income households are to receive half-day and full-day child care subsidy vouchers, respectively. Also, by providing home care subsidy only to households in the bottom

70 percent of the income bracket, households in the top 30 percent will need to pay 100,000~200,000 won a month to send their infants or toddlers to child care centers. As for infants and toddlers, the revised policy has increased the substitutability between home-based rearing and facility care services so that there is now more room for parental choice. In the case where the temporary child care subsidy--given to households choosing home-based caring--and the half-day child care subsidy--given to households using facility care services--are balanced, full-time mothers will be given more options to choose from considering their needs or conveniences and the development of their children.

However, the proposed revision in September is still not sufficient in many ways to accomplish the goals of child care policy. Above all, it plans to provide 100,000 won per month in the name of home care subsidy to children in the bottom 70 percent of the income bracket who do not use facility care services, which can be seen ambiguously in terms of its intention. If parents decide not to send their children to facilities in order to get the cash (100,000 won) every month, this raises severe concerns over whether children to be raised by such parents would grow up well with necessary and sufficient guidance. When the vulnerable households residing in rural remote areas including islets and mountains face difficulty in using facility care services, it would be more effective to directly offer necessary needs through support in kind or services for the development of children. To enhance the efficiency of fiscal management and educational investment and to improve the equality between social classes requires the adoption of a differential scale to child care subsidy for preschoolers, too, according to the employment status of the mother and income level of household. Only when the systems for 'child caregiver'--who provides households with direct home-based caring--and care subsidy provision are interrelated, can the needs of parents preferring home-based care be satisfied. The government's 'idolbom project' that operates the home-based child caregiver system needs to be carried out with enough human resources and improved qualification so that full-time mothers can freely choose to use time-based or temporary services of a child caregiver and dual-income households can freely choose to use full-day services. In addition to this, instead of uniformly raising the amount of expenses given to child care teachers for their improved treatment, it is recommended to encourage facilities to voluntarily act to improve the productivity of teachers and working conditions and wages by strengthening the government's monitoring and disclosure of information on facilities.

It is also important to keep in line with the goals of child care policy when fixing specific subsidies according to the September revision in the future. When the half-day subsidy voucher given to full-time mothers and the time-based temporary subsidy given to households choosing home-based care are excessive, this could undermine the motivation of women to work.

Now is the time for Korea to seek ways through child care policy to increase women's labor force participation and promote the development of children, and simultaneously raise the birth rate. In order to increase the fertility rate, Korea has so far worked to gradually expand the coverage and amount of child care subsidy and home care allowance so as to reduce the burden of child rearing expenses. However, child care subsidy is found to be more effective in reducing the tendency of delaying the first child than giving birth to more children, which makes it an inefficient policy tool to creating a new working population. Aside from this, assisting child rearing regardless of the mother's employment status could discourage women's motivation to work, which is not suitable for Korea today which has to respond to population aging by using its idle labor forces and lessening women's career interruptions. Supporting children with in-kind and services specifically targets children and therefore is more beneficial to their development than simple cash supports. This is a reason that Korea needs to prudently approach the introduction of child benefit. If working mothers are given child care subsidy and able to send their children to child care centers offering high quality services, this could help mothers return to the labor market at the time they want and therefore reduce the opportunity cost of giving birth. When women do not have to give up the healthy development of their children while pursuing their careers after giving birth, this could weaken the avoidance of childbirth.

References

Akerlof, George A., "The Market for "Lemons": Quality Uncertainty and the Market Mechanism", *Quarterly Journal of Economics* 84(3), August 1970, pp.488~500.

Barmby, T. and A. Cigno, “A Sequential Probability Model of Fertility Patterns,” *Journal of Population Economics* 3(1), April 1990, pp.31~51.

Blau, David and Erdal Tekin, “The Determinants and Consequences of Child Care Subsidies for Single Mothers in the USA,” *Journal of Population Economics* 20(4), October 2007, pp.719~741.

Blau, David M. and Alison P. Hagy, “The Demand for Quality in Child Care,” *Journal of Political Economy* 106(1), February 1998, pp.104~146.

Blow, Laura, Ian Walker, and Yu Zhu, “Who Benefits From Child Benefit?,” *Economic Inquiry* 50(1), January 2012, pp.153~170.

Brewster, Karin L. and Ronald R. Rindfuss, “Fertility and Women's Employment in Industrialized nations,” *Annual Review of Sociology* 26, 2000, pp.271~296.

Campbell, Frances A., Craig T. Ramey, and Elizabeth Pungello, “Early Childhood Education: Young Adult Outcomes from the Abecedarian Project,” *Applied Developmental Science* 6(1), 2002, pp.42~57.

Carneiro, Pedro and James J. Heckman, “Human Capital Policy,” in James J. Heckman, and Alan B. Krueger (eds.), I*nequality in America: What Role for Human Capital Policies*, Cambridge: MIT Press, 2005, pp.77~239.

Castles, Francis G., “The World Turned Upside Down: Below Replacement Fertility, Changing Preferences and Family-Friendly Public Policy in 21 OECD Countries,” *Journal of European Social Policy* 13(3), August 2003, pp. 209~227.

Center on the Developing Child, *A Science-Based Framework for Early Childhood Policy: Using Evidence to Improve Outcomes in Learning, Behavior, and Health for Vulnerable Children*, Harvard University, August 2007.

Cho, Yoon Young, *An Analysis of Women's Fertility and Labor Supply: A Lifecycle Model*, KDI Policy Study, 2006-01, KDI, 2006 (in Korean).

Choi, Ba-Wool, *Study on Income Distribution Change and Derivative Effect of Labor Supply of Consumption Pattern-focused on Dual-income Family* (PhD Dissertation), Doctoral thesis, Graduate School of Economics, Seoul National University, 2012 (in Korean).

Cunha, Flavio and James Heckman, “Formulating, Identifying and Estimating the Technology of Cognitive and Noncognitive Skill Formation,” *Journal of Human Resources* 43(4), October 2008. pp.738~782.

Cunha, Flavio and James Heckman, “The Technology of Skill Formation,” *AEA Papers and Proceedings* 97(2), May 2007. pp.31~47.

Currie, Janet, “Welfare and the Well-Being of Children: The Relative Effectiveness of Cash and In-Kind Transfers,” NBER Working Paper 4539, November 1993.

Edmonds, Eric, “Reconsidering the Labeling Effect for Child Benefits: Evidence from a Transition Economy,” *Economics Letters* 76, 2002, pp.303~309.

Ekert, O., “Effets et Limites des aides Financière aux Familles: une Expérience et un Modèle,” *Population* 41(2), 1986, pp.327~348.

Ermisch, John, “Econometric Analysis of Birth Rate Dynamics in Britain”, *Journal of Human Resources* 23(4), Autumn 1988, pp.563~576.

Eydal, Guðnỳ Björk and Tine Rostgaard, “Gender Equality Revisited - Changes in Nordic Childcare Policies in the 2002s,” *Social Policy & Administration* 45(2), April 2011, pp.161~179.

Fagnani, Jeanne and Antoine Math, “France: Gender equality a Pipe Dream?,” in Shila B. Kamerman and Peter Moss (eds.), *The Politics of Parental Leave Policies: Children, Parenting, Gender and The Labour Market*, Bristol: The Policy Press, 2009.

Fagnani, Jeanne, “Helping Mothers to Combine Paid and Unpaid Work-or Fighting Unemployment? The Ambiguities of French Family Policy,” Community, *Work & Family* 1(3), 1998, pp.297~313.

Grant, Jonathan, Stijn Hoorens, Suja Sivadasan, Mirjam van het Loo, Julie DaVanzo, Lauren Hale, Shawna Gibson, and William Butz, *Low Fertility and Population Ageing: Causes, Consequences and Policy Option*, RAND Europe, 2004.

Hantrais, Linda, “Exploring Relationships between Social Policy and Changing Family Forms within the European Union,” *European Journal of Population* 13, 1997, pp.339~379.

Ilmakunnas, Seija, “Public Policy and Child Care Choice”, in Inga Persson and Christina Jonung (eds.), *Economics of the family and Family Policies*, New York: Routledge Research in Gender and Society, 1997, pp.178~193.

Kang, Moon Hee, Mae Hee Kim, and Jun Eun Yoo, *Child Development Theory*, Community Publishing, 2011 (in Korean)

Kim, Hisam, "Economic Analysis of Private Education Problem and Policy Direction," 2011 KAAE Policy Seminar Proceedings, 7th Sep. 2012 (in Korean).

Koh, Youngsun, "Status and Challenges of Welfare Policy," *Integrated and Targeted Social Policy to Promote Employment and Social Cohesion (/)*, Research Monograph 2011-01, KDI, 2011 (in Korean).

Kooreman, Peter, “The Labeling Effect of a Child Benefit System,” The *American Economic Review*, 90(3), June 2000, pp.571-583.

Kwak, No-Ui, Kyung chul Kim, Yu Mi Kim, and Dae Geun Park, *Development of Preschool Children*, Yangseowon, 2007 (in Korean).

Lee, Bong Ju, Keum-Joo Kwak, In-Hoe Ku, Min Hwa Kim, Sun-Suk Kim, Ji Hyeun Kim, Hye Lan Kim, Hye-Jun Park, Hye Eun Shin, Myung Hee Yun, Kang Yi Lee, Kwang Ho Lee, Soon Hyung Yi, Ick Jeong Chung and Mee Jung Chin, *Comprehensive Survey of Child & Youth in Korea*, Ministry of Health and Welfare and SNU R&DB Foundation, 2009 (in Korean).

Lee, Sam-Sik, In Chol Shin, Nam-Hoon Cho, Hee-Kyung Kim, Yoon Sun Jung, Eun Young Choi, Na-Mi Hwang, Moon-hee Suh, Se-Kyung Park, Kwang-Hee Jun, Chung Suk Kim, Su Mi Park, Hong-Sik Yoon, Sung Yong Lee and In-Jae Lee, "Study of Low Birthrate and Comprehensive Measures," Research Paper, 2005-30(2), Low Childbirth and Aging Society Committee, Ministry of Health and Welfare and Korea Institute for Health and Social Affairs (KIHASA), 2005 (in Korean).

Lee, Youngwhan, *Macroeconomics*, Yulgok Books, 2005 (in Korean).

Masse, L.N. and W.S. Barnett, “A Benefit Cost analysis of the Abecedarian Early childhood Intervention,” National Institute for Childhood Education Research, 2002.

McDonald, Peter, “Low Fertility and the State: The Efficacy of Policy,” Population and Development Review 32(3), 2006, pp.485~510.

McIntosh, Alison, “Recent Pronatalist Policies in Western Europe,” *Population and Development Review*, 12, 1986, pp.318~334.

Melhuish, Edward C., “A Literature Review of The Impact of Early Years Provision on Young Children, with Emphasis Given to Children from Disadvantaged Backgrounds,” Institute for the Study of Children, Families and Social Issues, University of London, 2004.

Meyers, Marcia K., Theresa Heintze, and Douglas A. Wolf, “Child Care Subsidies and the Employment of Welfare Recipients,” Demography 39(1), February 2002, pp.165~179.

Ministry of Health and Welfare, "Creating childcare environments for happier children, more satisfied parents and better rewarded children," Press Release, 22nd Mar. 2012 (in Korean).

Ministry of Health and Welfare, *2010 White Paper and Health and Welfare*, 2011a (in Korean).

Ministry of Health and Welfare, *2011 Childcare Project Guidelines*, 2011b (in Korean).

Ministry of Health and Welfare, *2012 Childcare Project Guidelines*, 2012 (in Korean).

Mocan, Naci, “Can Consumers Detect Lemons? An Empirical Analysis of Information Asymmetry in the Market for Child Care,” *Journal of Population Economics* 20(4), 2007, pp.743~780.

Morris, John R. and suzanne W. Helburn, “Child Care Center Quality Differences: the Role of Profit Status, Client Preferences, and Trust,” *Nonprofit and Voluntary Sector Quarterly* 29(1) September 2000, pp.377~399.

Nyberg, Anita, “Cash-for-Childcare Schemes in Sweden: History, Political Contradictions and Recent Developments” in Jorma Sipilä, Katja Repo, and Tapio Rissanen (eds.), *Cash-for-Childcare: The Consequences for Caring Mothers*, Cheltenham and Northampton: Edward Elgar, 2010, pp.65~88.

Repo, Katja, “Finnish Child Home Care Allowance-Users' Perspectives and Perceptions” in Jorma Sipilä, Katja Rep,o and Tapio Rissanen (eds.), *Cash-for-Childcare: The Consequences for Caring Mothers*, Cheltenham and Northampton: Edward Elgar, 2010, pp.46~64.

Ribar, David C., “A Structural Model of Child Care and the Labor Supply of Married Women,” *Journal of Labor Economics* 13(1), July 1995, pp.558~597.

Rønsen, Marit, “Long-term Effects of Cash for Childcare on Mothers'' Labour Supply,” *Labour* 23 (3), 2009, pp.507~533.

Rose-Ackerman, Susan, “Altruism, Nonprofits, and Economic Theory”, *Journal of Economic Literature* 34, June 1996, pp.701~728.

Ryu, Bangran, Eun Mi Lee, Kyoung-Ae Kim, Kyounghee Kim, Ga Young Kim, Yu-Mi Suh, Do Hee Kim, *Evaluation Report on 2010 Education-Welfare Investment Priority Area Project*, Technical Report, TR-2011-03, KEDI, 2011 (in Korean).

Ryu, Bangran, Jung-Won Kim, Kyoung-Ae Kim, Yu-Mi Suh, Eun Mi Lee, Ga Young Kim, and Do Hee Kim, *Evaluation Report on 2009 Education-Welfare Investment Priority Area Project*, Technical Report, TR-2010-03, KEDI, 2010 (in Korean).

Schweinhart, L.J., J. Montie, Z. Xiang, W. S. Barnett, C. R. Belfield, and M. Nores, *Lifetime Effect: The High/Scope Perry Preschool Study Though Age 40*, 2005, Ypsilanti: High/Scope Press

Shleifer, Andrei, “*State Versus Private Ownership*,” NBER Working Paper 6665, July 1998.

Skolverket, *Five year with the maximum fee*, Stockholm, 2007.

Suh, Moon-hee and Woo-Jung Lee, "Pilot Study for the Adoption of Child Care Center Information Disclosure System," Research Paper 2012-03, KICCE, 2012 (in Korean).

Suh, Moon-hee, Nam Hee Do, and Shin Yeong Song, *Status and Improvement of Child Care Centers: Establishment and Accreditation*, Korea Institute of Child Care and Education (KICCE), 2011 (in Korean).

Suh, Yoo-Hun, *Brain Education to Better My Children's Futures*, iTree Publishing, 2010 (in Korean).

Sundell, Knut, “Examining Swedish Profit and Nonprofit Child Care: The Relationships Between Adult-to-Child Ratio, Age Composition in Child Care Classes, Teaching and Children's Social and Cognitive Achievements,” *Early Childhood Research Quarterly*, 15(1), 2000, pp.91-114.

Tekin, Erdal, “Child Care Subsidy Receipt, Employment, and Child Care Choices of Single Mothers,” IZA Discussion Paper 1121, April 2004.

Thévenon, Olivier, “Does Fertility Respond to Work and Family-life Reconciliation Policies in France?”, in Noriyuki Takayama and Martin Werding (eds.), *Fertility and Public Policy: How to Reverse the Trend of Declining Birth Rates*, Cambridge: MIT Press, 2011, pp. 219~260.

Waldfogel, Jane, “Infants and Toddlers,” *What Children Need*, Cambridge: Harvard University Press, 2006a, pp.36~82.

Waldfogel, Jane, “Preschool-Age Children,” *What Children Need*, Cambridge: Harvard University Press, 2006b, pp.83~156.

Walker, James R., “Public Policy and the Supply of Child Care Services,” in David M. Blau (eds.), *The Economics of Child Care*, New York: Russell Sage Foundation, 1991, pp. 51~77.

Walker, James R., “The Effect of Public Policies on Recent Swedish Fertility Behavior,” *Journal of Population Economics* 8, 1995, pp.223~251.

White, Linda A., “Explaining Differences in Child Care Policy Development in France and the USA: Norms, Frames, Programmatic Ideas,” *International Political Science Review* 30(4), 2009, pp. 385~405.

Wößmann, Ludger and Gabriela Schütz, “Efficiency and Equity in European Education and Training Systems,” European Expert Network on Economics of Education, 2006.

Yoo, Hae-mi and Moon Jeong Kim, "Effects and Improvement of Home Care Allowance," *Child Care Policy Forum*, No. 29, KICCE, 2012 (in Korean).

Zigler, Edward F., Matia Finn-Stevenson, and Nancy W. Hall, “Early Intervention and Child Care,” *The First three Years & Beyond: Brain Development and Social Policy,* New Haven and London: Yale University Press, 2002b, pp.65~95.

Zigler, Edward F., Matia Finn-Stevenson, and Nancy W. Hall, “Family Leave,” *The First Three Years & Beyond : Brain Development and Social Policy,* New Haven and London: Yale University Press, 2002a, pp.44~64.

Primary Care in Korea: The Road Ahead

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1. Introduction

Discussions on the need to strengthen primary care have been part of the discourse in Korea for some time, but it has not yet become clear just what this entails. This is because the people calling for stronger primary care all use the term in different ways, and the very concept of primary care is so comprehensive, and differs so much from one environment to the next, that all of them are able to cherry-pick whichever part of it suits their interests. Also, there is an element of these groups using the primary care issue as a way of addressing their own pressing concerns, rather than suggesting ideas for improvements in the overall interest of the system.

The loudest calls for stronger primary care are coming from the Korean Medical Association (KMA), which has demanded profitability guarantees for health care institutions at the clinic level. The argument is that because these institutions are where primary care is generally being practiced, the reduced financial pressures and lesser risk of being pushed out of the market that profit guarantees would create would itself constitute a strengthening of primary care. In contrast, the National Health Insurance Corporation, the insurer, tends to equate primary care with a specific function, namely gatekeeping. Indeed, this emphasis on gatekeeping among insurers is also witnessed in Western countries. Meanwhile, the Korean Association of Family Medicine, which has a relatively sophisticated perspective and ideas on the concept and functions of primary care, emphasizes the guidance of patients and the coordination of services within the healthcare system, while viewing itself as a body to serve those functions appropriately.

Despite these differences in view, policy authorities have failed to demonstrate a clear position on the concept or functions of primary care, instead focusing their energies on specific programs that arise over time, such as “chronic disease management program.”

Primary care is inherently diverse, and its definition is generally determined by the policy environment and the problem areas that each health care system needs to wrestle with. In that sense, it may be argued that the primary care discourse in Korea to date has not moved in any one uniform direction, and the many conflicting claims that have emerged out of the political-economic dynamics are a natural reflection of the process by which the health care system has taken shape over the years.

Even if we acknowledge the breadth of the definition of primary care, it does converge on a single goal: reworking the health care system to increase access for everyone and improve quality of life. For this reason, our approach needs to be not one of passively incorporating into our health care policy the definitions of "primary care" that the different interest groups use for their own ends, but of establishing a definition that takes into account primary care’s long-term goal. The Korean health care system has followed a rather different path than those taken by Western countries, and little is likely to come from any attempt to mimic specific models that themselves developed within specific national contexts.

The purpose of this study is to take a comprehensive look at the role primary care should play in Korea's health care system, the forms it takes, and what is needed for it to achieve these things. Since both the Korean health care system and primary care are very broad topics, the approach must inevitably be confined to an overview of certain topics that require close research attention. The second section looks at findings from empirical studies on the concepts and achievements of primary care, as well as avenues of approach in terms of a reform agenda. The third section examines the reemergence of primary care as a key issue in the health care policy agenda in terms of its relationship with the recent "megatrend" of social policy. The fourth section offers a brief survey of characteristics of the Korean health care system and the attempts that have been made over the years to improve primary care, while the fifth section mentions areas where future action is needed.

2. The Concept and Role of Primary Care and Its Successes and failures as Part of a Reform Agenda

A. Concepts and Definitions

Primary care is generally understood to consist of "services provided by a general practitioner" or a patient's "first (primary) contact with the health care system." The meaning of "primary" is also variously understood to mean "most important" in terms of health care services, or the treatment that is "least complex." The common conception of primary care, which conflates all of these things, is of the series of services that a patient receives after his or her first visit to a medical professional.

During the initial treatment, the health care provider decides what the patient's problem is based on the medical services he or she has received to date. In many cases, the provider determines that the patient wants certain services, but deems them unnecessary from the standpoint of a medical professional. Other roles of the provider include giving information, advice, and comfort to the patient. Occasionally, the provider may judge follow-up treatment to be necessary to diagnose and test for the possibility of a severe illness; based on his or her findings, he or she may either rule out the possibility of a disease or refer the patient for additional treatment. He or she may solicit advice from other areas or send the patient to an entirely different institution. Should the patient require health care services in several different areas, the provider performs an additional “coordinator” function, giving guidance on the path the patient should follow within the intricacies of the health care system.

To reflect all of these functions, primary care can be defined as "first-contact, continuous, comprehensive and coordinated care provided to populations undifferentiated by gender, disease, or organ system" (Starfield, 1994; Schoen, 2004).

While this definition may seem straightforward, it actually encompasses numerous layers of meaning, including ① a sequence of events, ② the lowest level of complexity, ③ a set of activities, ④ a strategy to achieve goals such as health care service accessibility, integration through cooperation and coordination between areas, and cost-effectiveness, and ⑤ a philosophical perspective on the meaning of health, the “ guiding spirit” of the health care system, and the extent of personal responsibility for healthy living (Vuori, 1986; Mullan, 1998; Sandy *et al*., 2009).

However, it can be difficult to ascertain just which of the health care services that actually take place constitute primary care. This is mainly because its concept and definition are, apart from the "first treatment chronologically" aspect, not only complex and multifaceted, but also inherently normative. Defining primary care as a concept is less about specifying which actual services it consists of, and more about expressing a value-laden position on what functions health care services should perform and what their ultimate aim should be.

For this reason, primary care is also understood by some to be not simply a specific type of treatment, but an effort to identify and remedy problems with the established health care system. In such cases, any clear articulation of the concept of primary care is better served by defining what primary care reform is meant to displace rather than what it is supposed to be (White and Marmor, 2009). For example, the definition given above is an opposing concept to "specialist-centered, technology-driven, hospital-focused, uncoordinated, and fragmented care."

Not only is there room for interpretation on whether “typical” primary care actually exists, or which countries might embody it, but the question is not especially important. The most damaging fallacy, yet one that is all too frequently succumbed to, is that a particular system in a nation known to have well-developed primary care should simply be imported into another country without consideration for differences of environment or linkages to other systems. It is more important that efforts be made to determine what problems are occurring in the different systems, what the proper response is, and what implications can be drawn.

B. Primary Care around the World

It is difficult to find any one service that embodies all the functions understood to fall under the rubric of primary care; the forms it takes in different countries are diverse and influenced by their particular health care environments. Classifying primary care into professional and community models, Lamarche *et al*. (2003) further subdivided it according to the extent of their coordination or integration, resulting in categories such as the professional contact model (Canada, U.S., Belgium), professional coordination model (Denmark, Netherlands, U.S. HMOs), integrated community model (Scandinavian countries, Britain's PCT, Canada's local community health care centers, or CLSCs), and the non-integrated community model (local health care centers in Canada's urban areas).

Macinko, Starfield, and Shi (2003) examined detailed elements to assess the degree to which actual health care systems conformed to the conceptual definition of primary care, scoring them by criteria such as implementation of a patient registration system, the pursuit of community-centered ideals through engagement with members of the community, and the relative strength of redistribution components. By their standards, Britain ranked first among 18 countries for the development of its primary care. The top tier also included Denmark (2nd), Spain (3rd), and the Netherlands (4th), while the bottom-ranked countries were the U.S. (15th), Germany (16th), Switzerland (17th), and France (18th).

Country-to-country differences in terms of major components were also large. Indeed, so were differences on the sources of primary care: in the case of Britain and Canada, general practitioners (GPs) were recognized as providers, while in the U.S. the category was large enough to include obstetricians and doctors of internal medicine (Table 1). Registration systems were found to be in place in Australia, Italy, the Netherlands, New Zealand, Britain, and Norway, while other countries used incentives to providers or users to encourage registration. Countries like France, Germany, and Sweden increased copayments for patients who did not go have their GP request treatment, while Canada lowered its payout for specialist services (Table 2).

The systems in place for primary care payment were similarly diverse. While Australia, Canada, France, Germany, and the U.S. generally used the fee-for-service (FFS) model, other forms included capitation, performance-based pay, and salary payment, as well as other mixed models.

Continuity in the different health care models likewise took different forms according to the extent of group practice, with a full spectrum observed between the twin extremes of solo practice at one end and integrative practice—providing treatment, rehabilitation, and prevention together—at the other (Boon *et al.*, 2004). While group practice within a region's public infrastructure was frequently observed in countries like Finland and Sweden, the environments in Canada, the Netherlands, and Britain were organized so that individual doctors maintained contractually-based independent units; in France, Germany, Belgium, and Italy, the solo practice model was the norm.

National differences can be observed in other major components of primary care as well, including the use of information systems and guidelines, institutional measures for after-hours treatment, and the types of diseases primarily treated (Schoen *et al*., 2009, Saltman 2006).

However, classifications by institutional framework do not provide a full picture of the services considered to constitute primary care in different national contexts, or of how they are actually provided. Schoen *et al.* (2006) questioned doctors in various countries to identity specific differences in the experiences of patients and physicians on the ground. Table 3 shows findings for coordination between providers, methods for treating chronic disease, and characteristics associated with treatment time.

<Table 1> Services under primary care, by country

Health service Seen as primary care	U.S.	Canada	Germany	Netherlands	U.K.
Ob/Gyn	Yes	No	No	No	No
General Internist	Yes	No	Yes	No	No
GP/Family doctor	Yes	Yes	Yes	Sometimes	Yes
Prescription drugs	Yes			No	No
Allied health Professionals	No	No	Yes	Yes	No
Home care (nursing, home help)	No	No	Yes	Yes	No
Related social care	No	No	Yes	Yes	No

Source: White and Marmor(2009)

<Table 2> Country Information, Survey Sample, and Practice Size Among Primary Care Physicians In Eleven Countries, 2009

	Country information		
	Primary care doctor role and payment[a]		
	Requlred to register	Gatekeeper for referrals	Payment
ITA	Yes	Yes	Mix capitation/fees/incentives
NOR[b]	Yes	Yes	Mix FFS/capitation

AUS	No	Yes	FFS
GER[c]	No	National incentives	FFS
NET	Yes	Yes	Mix capitation/FFS
NZ	Yes	Yes	Mix capitation/FFS
SWE[c]	No	National incentives	Most salary; private: mix capitation/ FFS
US	No	No	FFS
CAN[c]	No	National incentives	FFS
UK	Yes	Yes	Mix capitation/incentives
FRA[c]	No	National incentives	FFS

Notes: [a] Commonwealth Fund. Description of health care systems: Australia, Canada, Denmark, France, Germany, Italy, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom, and the United States. New York (NY): Commonwealth Fund; forthcoming, 2009 Nov.
[b] Norway does not require registration but strongly encourages and offers incentives; 98 percent are registered.
[c] Canada does not require referral but has provider incentives to discourage self-referrals. France, Germany, and Sweden use incentives for patients and providers.
Sources: Schoen *et al*.(2009)

<Table 3> Coordination of Care, Care for Chronically Ill Patients, and Office Hours Among Primary Care Physicians

	AUS (%)	**CAN (%)**	**GER (%)**	**NET (%)**	**NZ (%)**	**UK (%)**	**US (%)**
During the past 12 months, how often have your patients experienced the following?							
Problems because care was not well coordinated across multiple sites or providers							
Often							
Sometimes	5	5	5	5	4	15	5
Rarely/never	35	41	16	41	45	50	32
	60	51	78	52	51	34	60
A patient's medical record/clinical information was not available at the time of scheduled visit							
Often	4	10	3	1	2	7	8
Sometimes	24	31	8	15	25	29	32
Rarely/never	72	56	89	83	72	64	58
When you refer a patient to another doctor, for what percentage of patients do you get information back about the results of the referral?							
Almost all	76	62	68	61	82	75	37
Most	19	22	21	35	14	18	33
About half or fewer	5	15	11	4	3	7	28
After patient has been discharged, how long does it take to receive a full discharge report from the hospital?							
Less than 48 hours	10	3	4	5	29	4	14
2-4 days	21	6	7	7	19	10	25
5-14 days	40	28	35	35	34	34	34
15 days or more, or rarely receive a full report	28	58	53	48	18	52	23

Do you give patients with chronic diseases written instructions about how to manage their care at home?							
Yes, routinely	29	14	63	25	18	21	33
Yes, occasionally	62	57	30	62	72	62	53
No	9	26	7	12	10	17	12
Does your practice routinely use multidisciplinary teams? (%)	32	32	49	50	30	81	29
Does your practice use any nonphysician clinicians to Provide primary care services to your patients							
Yes, routinely	38	22	56	33	51	70	39
Yes, occasionally	30	18	26	21	35	17	16
No	33	58	19	45	15	13	42
Does your practice have office hours to see patients at the following times?							
Some early morning hours (before 8:30 a.m.)	43	27	80	85	37	33	40
Some evening hours (after 6:00 p.m.)	52	48	74	4	38	39	38
Some weekend hours	76	38	24	2	39	5	47
None of these	14	34	7	13	34	40	29
Does your practice have an arrangement where patients can be seen by a doctor or nurse if needed, when the practice is closed, not including ER? (%)	81	47	76	95	90	87	40

Source: Schoen *et al.* (2006)

C. Empirical Studies on Primary Care Outcomes

One frequent claim on the effects of primary care is that by strengthening it, it would be possible to reduce the amount of health care services dependent on high technology and capital-intensive investment, and to discover and prevent ailments before they reach the critical stages. The doctor would maintain a continuous relationship with the patient as the person responsible for his or her overall condition and could therefore coordinate services more effectively than a specialist in a particular illness or organ. Thus, it is argued, stronger primary care would promote public health by making high-quality medical services available at a lower cost.

However, empirical evidence that shows clear support for this widely held perspective among primary care proponents has proved elusive. With the exception of a few areas, the research conducted to date on various domains has not shown primary care actually leading unambiguously to desirable outcomes. Furthermore, clear methodological limitations have confounded the isolation of any one specific course of action.

Proponents of the benefits of primary care frequently point to Britain as an excellent example of improvements in the overall health care system resulting from developments in primary care. However, these arguments are both simplistic and somewhat inaccurate. To begin with, even in the British case, evidence that primary care actually led to improvements in the health care system is slight (Maynard and Bloor, 1995). While it is probable that the grounding in primary care has been functioning to improve the efficiency of the system as a whole, little consensus has been reached on which of the many elements packed into the term "primary care" have affected system outcomes in terms of accessibility, cost-effectiveness, and health (Gabby and Stevens, 1994; Sutton and McLean, 2006).

For instance, improvements in cost controls in the British system, rather than specifically being the result of primary care, are also very likely the result of restrictions on the supply of secondary and tertiary health care services, including salary systems, capitation, or budget limits and other financial restrictions. Also, while it has often been argued that other countries should introduce British-style capitation or registration systems as a way of performing preventive services and other primary care functions, the fact that even Britain had to adopt a fee-for-service model offering appropriate compensation in order to strengthen these areas (Maynard, 2005) suggests that various preconceived notions about primary care ought to be reconsidered.

Moreover, at least in some areas, Britain has been moving in the opposite direction from strengthening primary care: a series of health care reforms (GP fundholding, PCT) has been underway there since the 1990s with the aim of addressing user complaints through improved access to specialists and hospital services (Stevens, 2004). This could be interpreted as evidence that the health care system, for all its favorable performance indicators, may not have struck an appropriate balance with the desires of its users.

Hence, the findings from different levels of research on primary care outcomes need to be examined with caution. Empirical studies can be broadly divided into micro-level studies on GP/specialist treatment outcomes and the functional outcomes of primary care; macro-level studies that generally compare the system outcomes for different representations of primary care characteristics; and studies on cost impacts.

The bulk of the studies showed positive effects from primary care. However, the inherent issues of uncontrolled factors and unclear causal relationships have often been pointed to as problems with these types of empirical studies. Regardless of the weight of numbers, some room for debate remains between those studies that actively demonstrate the positive effects of primary care and those that raise questions about their credibility.

1) Micro-Level Analyses of Primary Care Outcomes

Many studies measure outcomes for cases in which a specialist is substituted with a GP in providing some specialized treatment, with all other conditions assumed to be equal. While some have concluded that the outcomes of specialist treatment are positive (Bartter and Pratter, 1996; Harrod *et al.*, 1999; Smetana *et al.*, 2007), others found no significant difference when patient characteristics were controlled (Frances *et al.*, 2000). In particular, studies showing no significant difference between specialist and GP performance for frequent chronic ailments such as hypertension and diabetes (Greenfield *et al*., 1995) can be found alongside others showing the conflicting finding that specialist treatment had a more positive outcome (Zgibor *et al.*, 2002).

But the majority of micro-level studies on primary care as a whole have noted the low mortality rate among patients who make regular use of a GP (Franks and Fiscella, 1998) and the low cost that results from primary care patients making less use of medical services on the whole and receiving a lesser amount of testing (Harrod *et al.*, 1999; Greenfield *et al.*, 1992). In particular, studies have shown that people with regular, long-term relationships with health care providers have higher access to preventive services and quality of treatment as well as lower rates of hospital admission and overall health care costs (Blewett *et al*., 2008; DeVoe *et al*., 2009; Saultz and Lochner, 2005; Weiss and Blustein, 1996).

However, most of these studies involve a simple comparison of findings for patients who use either GPs or specialists. This presents a clear limitation, in that it does not control for patient characteristics, characteristics of the community in which the treatment occurs, medical resources, or environmental factors. A representative example are the studies on outcomes for patients with a long-term relationship with their physician, which face severe problems resulting from their failure to control for differences in behavior between patients with and without long-term relationships, or between providers who are or are not chosen consistently over the long term.

In contrast, methodological issues are relatively less of a concern in studies demonstrating lower levels of testing and other treatment. In these cases, regions and fields have been narrowly defined to eliminate differences in the characteristics of patients who visit GPs and patients who visit specialists (Friedberg *et al.*, 2010).

2) Macro-Level Analyses Quantifying the Realization of Primary Care Aims to Measure System Outcomes or Compare Systems

Many studies show that higher rates of GP use are associated with favorable effects on mortality rates, emergency room use rates, hospitalization rates, and costs (Baiket and Chandra, 2004; Kravet *et al*., 2008; Shi *et al*., 2003; Parchman and Culler, 1999). However, others also show that the distribution of GPs is not exogenous, but related to the level of health in the population (Gravelle, Morris and Sutton, 2008), which not only raise questions of endogeneity, but also show either no correlation or the opposite result (Ricketts and Holms, 2007; Young, 2001).

Sirovich *et al.* (2008) observed both GPs and specialists within the fee-for-service model working to guarantee a steady income in response to competitive pressures in their region. Regions with large health care spending tend to have higher amounts of testing, patient visits, and medical practices than those with lesser expenditures. What this indicates is that the local health care market environment matters, not that greater numbers of GPs guarantees a positive outcome.

Generally, many studies comparing primary care with specialist-centered health care in system assessments have found positive effects on health conditions by applying indicators for the realization of primary care aims, including GPs as a percentage of the population, ratio of GPs to specialists, regular visits to GPs, the presence of a registration system, involvement of community members in relevant decision-making, the presence of primary care centers in residential areas, the size of the copayment burden, and the relative location of GPs (Atun, 2004; Engström, Foldevi and Borgquist, 2001; Macinko, Starfield and Shi, 2003; Starfield, 1994; Starfield *et al*., 2005: Kruk *et al*., 2010).

While these studies have suggested that a greater presence of primary care characteristics may be associated with better outcomes at lower costs, Briggs *et al.* (2002) argued that there was no basis for the argument that GP-centered health care systems had led to service improvements or better results. In their view, many studies did not adequately take into account unobserved system characteristics, such as cultural preferences for GPs or perceptions of them as “familiar,” as well as the different behavior of GPs and specialists under competitive conditions.

Thus, a common characteristic of many studies emphasizing the positive outcomes of primary care is the lack of controls for certain variables, which frequently results in lower reliability for the results of the analysis.

3) Analyzing Cost Impacts

Many have argued that primary care fundamentally lowers costs (Starfield, 1994; Macinko *et al.*, 2003; Boerma, 2006; Docteur and Oxley, 2003), but others have maintained that evidence for this "virtuous cycle" between stronger primary care and lower costs is not conclusive. Russell (2009) and Cohen *et al.* (2008) argued that preventive measures did not lower costs, pointing to variation in the cost-effectiveness of such efforts according to population, as well as method and frequency of intervention.

It is also unclear whether gatekeeping, considered a representative primary care characteristic, is actually effective at reducing costs—despite the principal policy aim being cost controls. Gerdtham and Jönsson (2000) produced a representative study showing the comparative success of gatekeeping countries in controlling costs, but Delnoij *et al.* (2000) concluded from observation of 18 OECD countries that gatekeeping countries merely saw a slower increase in ambulatory care expenditure, while showing no difference from non-gatekeeping countries in terms of their level or growth of total health care expenditure.

D. Primary Care as Part of a Reform Agenda

Primary care is frequently mentioned as an area for reform in many countries, Korea among them. The systemic problems targeted for reform generally include ① the failure of necessary functions to be provided and ② inefficiencies resulting from excessive use of relatively unnecessary services. Proponents of primary care argue that it is capable of fixing these problems.

The problem of unmet needs in particular—the failure of medical systems to adequately provide things that are necessary—points to primary care's role in providing continuous and comprehensive services as needed by the patient. In particular, an increase in the population exhibiting more than one symptom amid an overall rise in chronic disease is a direct factor in the growing need for treatment services spanning multiple areas to be effectively linked together and provided to the patient in an integrated fashion. The second problem, unnecessary treatment and excessive specialization, stems from providers not offering services within an integrated framework with other providers, a "professional inward-directedness," wherein physicians treat patients only within their area of expertise (Boerma, 2006). In this case as well, systemic characteristics either leave this tendency unaddressed or actually strengthen it.

These two problems are actually closely related. The idea of limiting access to services deemed "unnecessary" can be turned around to mean providing effective navigation within the intricacies of the system so that patients receive the services they do need.

The most frequently discussed way of addressing this is to restrict the use of health care services. In Korea, for example, an attempt was made in the late 1980s to designate treatment zones and limit the use of services emulating the British model. But the idea that forcible rationing of services was an effective way of providing necessary services without waste originated out of observations of a very specific system (British health care) in a very specific historical context. One study on the British model in the 1960s showed that 250 of every 1,000 people used health care services, with nine of them using hospitalization services and just one being referred to a university hospital (White *et al.*, 1961). It took issue with most medical education and the health care service system focusing on higher-level institutions treating rare diseases, and was used later to bolster calls for improvements to the health care system. For example, the definition of primary care[46] in WHO's Alma-Ata Declaration in 1978 was based on the observation that common diseases occurred commonly, and uncommon diseases did not (Geyman, 2011).

But the primary care agendas of the different countries of the world have included a broader range of topics at a broader range of levels than simply rationing the use of services through gatekeeping. Which aspect of its definition is emphasized has depended on each country's historical experience, limiting conditions, the problems faced by its health care system, the perspectives of expert groups, and political dynamics (McCallum *et al*., 2006; Sheaff *et al*., 1998; White and Marmor, 2009). For example, gatekeeping systems and capitation have firmly taken root in the Netherlands and Britain, which have a strong tradition of family doctors, but inadequate coordination has been recognized as a problem area. This stems from the inherent potential for conflict between the two functions of gatekeeping (① controlling costs by having GPs provide treatment in all cases but those where higher levels of medical services were clearly

[46] The concept of primary (health) care defined in the Alma-Ata Declaration includes locally based community participation and the use of various healthcare resources available within the community ("Primary health care is essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally acceptable to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination. It forms an integral part both of the country's health system, of which it is the central function and main focus, and of the overall social and economic development of the community. It is the first level of contact of individuals, the family and the community with the national health system, bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process."), whereas the most influential definition of primary care, the one provided by the U.S. Institute of Medicine, assumes medical personnel to be the principal providers of it ("Primary care is the provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients and practising in the context of family and community."). Developed countries and urban areas with abundant health care resources may be seen as applying the IOM's version of primary care, while developing countries and rural areas that need to use a variety of health care resources are viewed as being primarily focused on primary health care, but the two have also been subsumed within the concept of primary health care (Sheaff, 1998; Vuori, 1984).

needed, and ② linking and coordinating services by different providers) and the relative emphasis on the deterrence of unnecessary use of higher-level services in these countries (Calnan, Hutton and Tiljak, 2006). As a result, a major part of the reform agenda has involved adding targets for greater efficiency and cost control by way of stronger competition and coordination.

In countries like Canada, Germany, the U.S., and France, GPs have performed a limited gatekeeping function within the FFS model. Because FFS and a high rate of health care usage were seen as responsible for increasing costs, the reform discourse was dominated by the topic of cost control, and primary care reforms generally centered on greater levels of gatekeeping and the introduction of capitation.

National reform efforts structured around these core elements have come in three types: ① increasing the authority of GPs (purchaser or coordinator), ② expanding the scope of primary care, and ③ improving the supporting conditions for system-level organizations and resources (Gervas and Fernandez, 2006; Schoen *et al.*, 2009). Elements observed to have a major impact on the success or failure of reform include ① the context of reforms, ② political dynamics (especially the influence of GP groups or the reputation and level of trust GPs enjoy within the community), and ③ the importance of service user preference (Boerma and Dubois, 2006; Rico *et al.*, 2003; Boerma and Rico, 2006). These affect whether obstacles encountered in the reform push can be overcome and, if so, how easily. For example, typical difficulties encountered when attempting to introduce a gatekeeping function include ① the general public's lack of trust in GPs, ② the lack of primary care physicians with adequate training and qualifications, ③ the lack of restrictions or coordination on the available usage period for primary care, ④ objections from specialists, ⑤ competition between insurers (in systems where there are several), and ⑥ the tendency of some users to not be content with the opinion of one physician (Tabenkin and Gross, 2000). Reform success, or lack thereof, has also been determined by how widely the society recognizes the need for the proposed reforms, and whether the reformers themselves are trusted.

The reason this policy context and support for reform attempts are so important is because of the typical political environment encountered by reforms involving primary care. The general situation is one in which a political elite and groups of health and medical specialists are arguing on behalf of primary care, while the public remains apathetic and politicians and insurers are no more than passive supporters. When active resistance from the groups that stand to lose from the reforms comes into play, popular support becomes crucially important if the reforms are to actually come to pass. This means that the likelihood of success can be increased by the use of incentives rather than force and that it demands a change in public awareness on the advantages of reforms.

France's reform attempts in the late 1990s could be viewed as a representative example of this. In 1998, the Casse Nationale d'Assurance Médicine (CNAM) assigned various public duties to GPs while implementing a gatekeeper system (*médicin referent*) on a voluntary basis, with the support of MG-France, the most powerful faction in the GP union. Rates of participation ended up being low—10 percent for physicians, just 1 percent for patients—and the plan was quickly abandoned for increasing expenditures without producing visible results (Com-Ruelle, Dourgnon and Paris, 2006; Lancry and Sandier, 1999).

Specialist-dominated Germany, where a high percentage of the population used specialist services without referrals, attempted to introduce gatekeeping in the 1990s, but it failed to produce positive results due to a lack of interest from the public and physician groups which were dominated by specialists. Amid a series of reforms affecting the entire health care system (including a health care system modernization act in 2004 and a competition strengthening act in 2007), the country stipulated in law in 2004 that insurance should provide the option of registration with a GP who performed a gatekeeping function (Greb *et al.*, 2004). But as of late 2007, only around 19 percent were registered, and half of available insurance did not provide the option.

These examples show that reforms focused on establishing a gatekeeping system and coordinating health care service use have been unsuccessful in eliciting interest or support from the public, with the economic interests of the stakeholders and inter-group dynamics being the primary obstacles. However, in the German case, participation by the elderly and patients with chronic or severe ailments was high, as was (generally) satisfaction with GPs, while registration rates were found to be conspicuously lower where the access to specialists was entirely controlled by GPs (Lisac *et al.*, 2010).

One interesting example is Canada, where a culture of universal GP use has taken root. There, attempts in 1995 to position capitation and registration as part of a reform agenda were thwarted by fierce objections from physicians and the public alike. Notably, efforts since then have emphasized functional aspects, such as increased first contact accessibility, coordination, and the advantages of preventive services over capitation or registration (Starfield, 2010; White and Marmor, 2009).

France's implementation of the *médecin traitant* in 2004, which succeeded in putting primary care into the policy process, shows the importance of several elements, namely political support, the backing of physician groups, and an incremental approach. To begin with, it was designed to preempt objections from either specialist-preferring patients or specialists worried about potential economic losses by allowing the public to register with a preferred physician who could be either a GP or a specialist, while offering financial incentives. In its first year, 81 percent of the population took part, 99 percent of them registering with a GP; in 2009, the participation rate rose to 92 percent. One factor influencing the system's success was the fact that more than 80 percent of the public already had a regular physician, and research suggested that a main reason the effort did not run up against political objections is because specialist compensation was adjusted upward through powerful lobbying by specialist groups (Com-Ruelle, Dourgnon and Paris, 2006; Ricketts *et al*., 2012).

Opinions remains divided on the actual benefits of the reforms. First of all, the changes resulted in a more complex system of payment for specialists receiving referrals; some critics have contended that since most of the public had already been visiting a regular GP, the reforms merely resulted in increased treatment costs payable to specialists, without any other major changes. At the same time, optimists have said that CNAM warrants praise for laying the groundwork for pay for performance (P4P) by requiring the linkage of records for individual physicians and the patients registered with them. Obviously, this is an area that requires ongoing observation, since the effects can only be verified in the long term.

The primary lesson that can be drawn from the French case is, obviously, the importance of coordinating political interests and minimizing the aspects that would lead to objections. It could also be argued, however, that accommodating stakeholder preferences to eliminate objections from different corners would compromise the initial spirit of the reforms. If the 1998 attempt to introduce a gatekeeping system failed because of objections from interest groups, then the institutional changes in 2004, while successful in gaining acceptance due to a system design that favored established interests within the existing dynamics, also eventually blurs the spirit of "reform."

Another reason cited for these outcomes is a policy-making process that is politics-based rather than evidence-based (Dourgnon and Naiditch, 2010). In other words, when a consensus based on real-world problems on the need for reforms is not reached, and the knowledge base predicated on the clarified policy goals is not broadened, it becomes difficult to ensure the necessary momentum for changing the existing dynamics or quieting objections. Rather, any institutional changes that do occur are unlikely to result in practical improvements (Maynard and Bloor, 1995).

3. Primary Care Comes to the Fore: The Rising Need for Chronic Disease Management in an Aging Society and the Reduction of Social Exclusion

A. Growing Need for Social Integration

A growing income gap and deepening social exclusion as a result of skill biased economic growth and globalization have been reported in all countries of the OECD (OECD, 2011; WHO, 2008). Increasing concerns about social cohesion are underscoring the need to emphasize it in the formulation of social policy.

In terms of the health care system, the issues of social disparity and exclusion have direct ties to the strengthening of primary care. Clear class-based differences are observed in economic and regional accessibility to large hospital services, specialist services, and high-tech services (Doorslaer *et al*, 2004; Starfield, 2010; Kruk *et al*., 2010; Shi *et al*., 2005; Shi *et al*., 1999; Gwatkin *et al*., 2004; Glazier *et al*., 2009). For example, while no correlation has been observed between GP visits and education level, a positive correlation has been found between specialist visits and educational level, and between education level and the tendency to skip the GP stage and proceed directly to a specialist (Starfield, 2010; Glazer *et al*., 2009). Similarly, when income level was used as a variable, no particular correlation was observed with GP visits, while specialist visits were observed to have a positive correlation (Doorslaer, Koolman and Jones, 2004).

Similar income-based differences have been found for attitudes on primary care reforms. Studies analyzing the characteristics and motivations of groups refusing to comply with the gatekeeping system found that low levels of trust in GPs and lesser degrees of compliance were associated with higher levels of wealth and education, as was the desire to avoid wasting time and money when they would eventually be referred to a specialist anyway, and a perception that GPs were an obstacle to receiving specialist treatment (Gross *et al*., 2000; Kulu-Glasgow *et al*, 1998; Grumbach *et al*, 1999; Olivarius *et al*., 1994,).

Income-based disparities in health outcomes are also related to primary care needs. The argument here is that because mortality rate is influenced by income, it may be possible to mitigate the effect of income on mortality rate by strengthening primary care (Shi *et al*., 2005; Shi *et al*., 2002). Similarly, Kruk *et al.* (2010) noted that primary care had the effect of mitigating wealth based disparity, others have suggested that because the compensation structure for society as a whole is subject to worsening disparities, the health care system should be bolstered in such a way as to ensure that more benefits go to vulnerable members of the population (Gwatkin, Bhuiya and Victor, 2004; Graham and Kelly, 2004).

These points that primary care reforms aimed at improving the system to reduce income-based disparities in access to necessary medical services, including ease of first contact, are closely linked to issues of income equality and redistribution. This, in turn, means that the importance of primary care reforms has not been greatly impacted by the ongoing debate over empirical evidence of cost-effectiveness or efficacy.

B. Growing Importance of Medical Service Coordination and Chronic Disease

Management in an Aging Society

An increase in chronic disease and health care spending due to an aging society has emerged in various countries as a major factor drawing renewed attention to the importance of strengthening primary care (Frenk, 2009; Schoen *et al*., 2009; Russell, 2009; Mur-Veeman *et al*., 2008, Arevian, 2005; Health Council of the Netherlands, 2004). A key characteristic of primary care is the continuous long-term relationship between provider and patient, and the observed trend is arguably a natural turn of events given the importance of ongoing treatment in effectively managing chronic disease. However, the existence of a system in which payments are received on a fee-for-service basis intensifies competition between providers, impeding cooperation and coordination between them. Also, because of the difficulty of taking into account individuals with complex combinations of symptoms, various systemic difficulties must be surmounted in any efforts to address an aging society in a health care system based in a fee-for-service model.

The Chronic Care Model (CCM) intervention, a form of policy intervention to support health care providers in offering important services to sufferers of chronic disease, includes six elements, including assisting patients in managing their own condition and establishing a treatment information system. Quality of treatment has been reported to be particularly strong for asthma, congestive heart failure, depression, and diabetes (Tsai *et al*., 2005; Bodenhemer, Wagner and Grumbach, 2002). However, neither consistent determinations nor adequate support have yet been found for its cost-effectiveness or clinical efficacy, taking into account both the costs and positive effects from adapting treatment methods along CCM lines. This stems largely from the difficulty of determining a consistent method of assessment due to the large number of elements and policy intervention methods that go into CCM (Bruin *et al.*, 2012). One inherent factor confounding the emergence of consistent assessment findings on CCM is the fact that because it includes services that receive little if any payment under a fee-for-service system, its effects vary greatly by treatment payment system and other aspects of the institutional environment (Coleman, 2009).

Germany and the Netherlands are notable examples of countries expending policy efforts to strengthen coordination and management of chronic disease under a social insurance system. Launched in 2003, the former's Disease Management Program (DMP) provides coordinated treatment by centrally determined standards for six diseases, including diabetes. Germany is also working on incentives to promote cooperation between health care providers and others through medical care centers and polyclinics (Lisac *et al.*, 2010). The Netherlands, for its part, has focused policy efforts since the 1990s on addressing the perceived problem of responding appropriately to the rise in patients exhibiting complex symptoms with its fragmented health care system. Dutch GPs were recognized as a politically powerful lobby with the highest earnings in the EU (Smeenk *et al.*, 200), and critics contended that coordination and treatment as a whole were relatively weak under a system that respected their independence. The main focus of attention in health care reforms has been promoting the efficiency of the health care system through better coordination (Marmor, Freeman and Okma, 2005; White and Marmor, 2009). Representative methods employed in the Netherlands include expanding GP group treatment through transmural or extramural centers and encouraging unity between home care associations (Saltman, 2006; Mur-Veeman, Raak, and Paulus, 2008).

4. Primary Care in the Korean Health System

A. Korean Primary Care by the Numbers

Given its comprehensive nature, it is difficult to choose valid indicators for measuring the development of primary care at the national level. It may be useful, however, to offer a rough comparison using indicators submitted to the OECD in order to examine different countries under a narrow lens. Table 4 shows Korea's rank among countries submitting data to the OECD for six indicators in the areas of promoting health, prevention, and primary care (OECD, 2011).

<Table 4> Korea's Rank in Areas of Primary Care

Indicator	Korea's Rank	No. of Countries Submitting Data
Asthma hospital admission rate	26	28
Chronic obstructive pulmonary disease hospital admission rate	17	28
Uncontrolled diabetes hospital admission rate	22	24
Vaccination rate for pertussis	31	39
Vaccination rate for measles	27	40
Vaccination rate against influenza	5	29

Because asthma, chronic obstructive pulmonary disease, and diabetes are far less likely to lead to hospital admission if properly managed through primary care, generally high levels of admission can be used by some as an indicator of the weakness of primary care in Korea (OECD, 2012). However, these results should be interpreted with some caution, given factors such as ① differences in health care utilization rate, ② difference in health care systems (e.g., payment system with different risk sharing scheme between payers and providers), ③ differences in data sources and coding practice, and ④ differences in disease prevalence.

B. Outcome-Based Evaluation of Primary Care Functions

While it is difficult to ascertain through narrowly defined indicators, it is also necessary to observe the degree to which the aims of primary care are met within the system as a whole. As a concept, primary care encompasses many different elements, but one fundamental function is coordination, to suitably provide the needed services at the necessary times while avoiding overuse of unnecessary services. Since Korea is currently undergoing a rapid aging process, management of chronic disease must be included as one of the most urgently needed functions of the health care system.

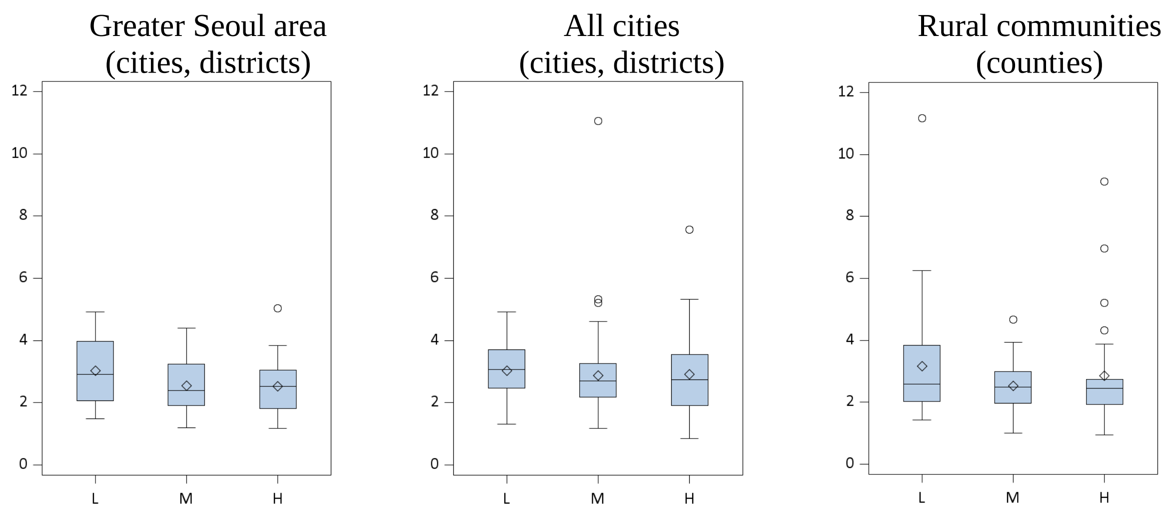
1) Disparities in Health Care Use

Because appropriate use of primary services can prevent the development of severe ailments and the need for treatment at higher-level medical institutions, primary care may hold greater importance for economically disadvantaged segments of the population and residents of less-favored areas, who are ill-equipped to bear the costs of expensive treatment. The question of whether disparities between population groups and regions are arising in the use of primary care services is of major interest in policy-making.

Illustration 1 shows the rate of outpatient service usage for chronic diseases among people aged 65 and over. While differences between urban and rural areas or between income levels are not large, considerable disparities are observed within urban or rural areas and within income groups. For (predominantly rural) county-level units, a more than fourfold difference between maximum (6.25) and minimum (1.4) was observed in outpatient usage rates for chronic diseases even when outliers were omitted. A regression analysis to determine the factors responsible for this difference showed the largest impact on outpatient usage rates came from the number of clinics within the region (Yun Heesuk and Lee Sang-il, 2012).

One thing that should be noted in interpreting the illustration and table is that it is difficult to determine if the overall level is excessive, or if certain regions are underutilizing services, without presuming some “appropriate” level of usage. The analysis merely confirms the existence of a disparity, and any determination on the need for policy interventions would require additional analyses on whether these regional disparities in usage are resulting in disparities in health outcomes. For example, they should be combined with an analysis of public data on regional differences in the rates of patients being hospitalized because of the progression of a disease that could have been adequately managed.

[Figure 1] Distribution of Outpatient Service Usage for Chronic Ailments among the Elderly by Income and Region



Note: 1) The boxes in the box-whiskers plot show the upper and lower quartiles, the middle line show the median value, and the diamonds show the average value. Values more than 1.5 times greater or lesser than the IQR (interquartile range, or the difference between the upper and lower quartiles) are shown separately (not connected), with minima and maxima within the scope of 1.5 * IQR linked to the box.

2) Outpatient usage rate (chronic) was calculated as the percentage (%) of elderly people using outpatient services for a chronic disease at a given time out of the number of elderly people living in that region.

3) High (H), Medium (M), and Low (L) refer to the per capita local income tax and resident tax for the regions in each category.

Data: 2010 Patient Survey, Korean Institute for Health and Social Affairs; 2011 Local Tax Almanac (Ministry of Public Administration and Security).

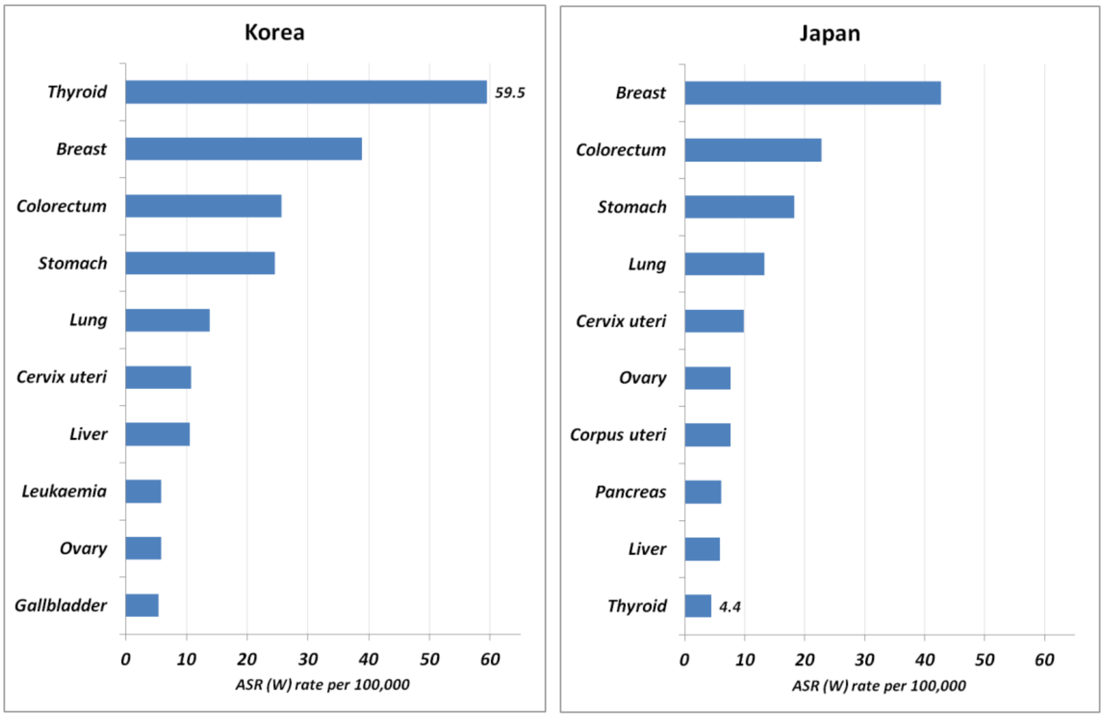
2) Lack of Coordination

The failure to restrain overuse of less-needed services while guaranteeing the access to necessary services is often recognized as a result of induced demand and competition stemming from the fee-for-service model. But while the direct effects of the payment system are obviously larger, they are not the only factor. Also of crucial importance is government policy to promptly detect overuse of health care, determine whether this is a market response based on skewed or exaggerated information, and distribute relevant information. Another important ongoing part of health care policy is the promotion of specialist and consumer guidelines for health care use, as well as gathering the necessary knowledge and information to do this. Necessary prerequisites for this include an oversight organization with a clearly articulated duty to monitor the health care service market and a permanent policy infrastructure for ease of information gathering, analysis, and dissemination.

The performance of Korean health care policy in this area has not been strong. Not only has the necessary policy infrastructure failed to take shape amid an ongoing focus of policy energies on efforts to control health insurance spending, but heightening conflict over the payment system and costs has led to failures in establishing a policy infrastructure to monitor the market and formulate health care policy.

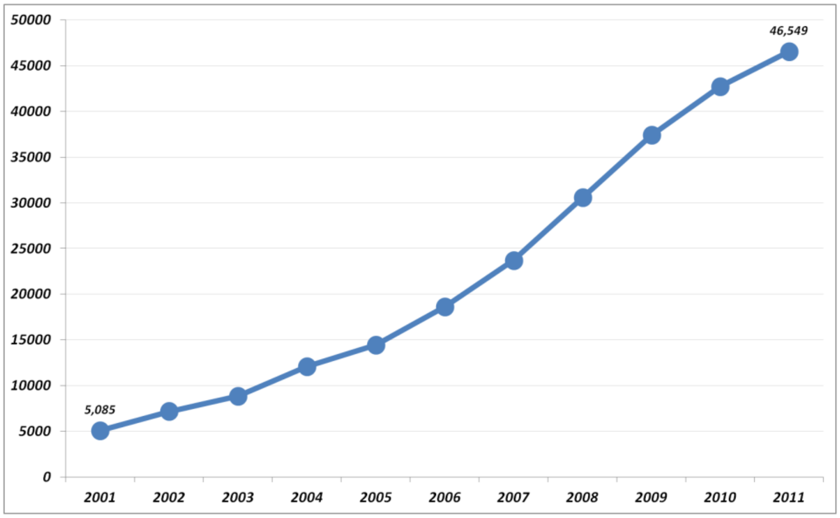
Illustration 2 shows differences in the incidence of thyroid cancer among women in Korea and neighboring Japan. In 2008, the rate in Korea was already 14 times as high as Japan's. The increase in patients admitted for thyroid cancer shown in Illustration 3 testifies to the rapid development of this phenomenon—a ninefold difference in the past 10 years. Given that a certain percentage of those hospitalized would be undergoing cancer surgery, the rate of increase for those operations would also be at a similar level. The increase in diagnostic services using ultrasound, which have become widespread down to the clinic level, is believed to have contributed greatly to this increase (An Hwa-yeong and Park Yeong-ju, 2009), but the results are enough to suggest that there has been virtually no response from health authority at the system level to determine whether thyroid screening for the general population (with no symptom) is appropriate (Korean Academy of Family Medicine, 2009), or what size tumors are being operated on, or to disseminate relevant information. This shows the problems of a system that has not only been unable to prevent conspicuous overuse of health care services in certain areas due to a distorted competitive environment in the market, but that has also failed to respond effectively after the fact.

[Figure 2] Incidence of the 10 Most Common Cancers in Korea and Japan (2008)



Data: http://globocan.iarc.fr/

[Figure 3] Trends in Thyroid Cancer Hospital Admissions (no. of people)



Note: Number of treatments were only available for 2001, 2002, and 2004. Values from 2003 and 2005—2007 were extrapolated using both treatment number and patients number data.
Source: Yearly Treatment Cost Statistical Indicators, Health Insurance Review & Assessment Service

C. The Korean Health Care System and the Underdevelopment of Primary Care

1) Characteristics of the Health Care Development Process

To fully understand the issues affecting primary care in Korea, it is necessary to examine the nature of the health care system as a whole, including the process by which the profession of "physician" developed and the relationships that it has established over the years with government policy. Even the most cursory understanding of the health care system requires going back in time to the Japanese occupation, which marked the beginning of modern health care in Korea. The Japanese rulers guaranteed a monopoly for practitioners of Western medicine in health care by evicting from the government the doctors of Oriental medicine (who had dominated the health care market as recently as the late Joseon Dynasty) and replacing them with Western-style physicians. In the process, physicians were invested with a great deal of social and economic status (Jo Byeong-hui, 1992). Unlike professionals in the West, who established their standing within a long-term process of compromise with society at large amid efforts to guard their own short-term interests, medical specialists in Korea could be characterized as having been handed monopoly rights and status as professionals in a very short period of time by public authorities, i.e. the colonial rulers (Johnson, 1973). Thus formed by state authorities in the short term, these professions would go on to evince a clear insularity and exclusivity in their future negotiations with the society to which they belonged.

A second characteristic is a specialist, high technology oriented system established at the early stage. The introduction of a health care system along U.S. lines under that country's military administration in the wake of Korea’s liberation from colonial rule is believed to have had a major impact on this course of events. Whereas the aims of medical education under the Japanese rulers had been to produce large numbers of doctors educated in a short period of time to meet primary care demands, training GPs under four-year systems at seven medical schools (except the medical division of Keijo Imperial University, which operated under a six-year system), medical education after 1951 followed a six-year system. In the report to the Korean government in 1952, the World Health Organization recommended introducing a paramedic system, but its implementation was blocked by objections from the government and medical school professors (Committee on the Sixty-Year History of the Korean Economy, 2011).

The Minnesota Project, carried out between September 1954 and June 1961 as part of an educational aid package from the U.S. International Cooperation Administration (ICA), has also been pointed to as a factor in hastening these developments. For the project, medical school professors who had been given the opportunity to study and train in the U.S. worked to implement new teaching methods and medical technology, four-year nursing programs, internships, and residencies. The project is now viewed as having been decisive at making specialists the focus of the Korean health care system.

A third characteristic is the rapid flourishing and equally rapid decline of public health. Health centers were introduced by the U.S. military administration, with a shift in focus from the regulatory hygiene management of the Japanese colonial rulers toward a form of public health centering on services and education. Subsequent efforts to develop the health center network took place in conjunction with family planning programs and programs to solve the problem of doctorless villages and were a part of the economic development process. Through the 1980s, health centers and their branches accounted for the bulk of primary care in farming and fishing villages (Maeng Gwang-ho, 1999).

But public health entered a slump in the late 1980s amid the expansion of health insurance to all citizens and the concerted effort to increase the amount of medical personnel and facilities. Subsequent government health care policy was squarely health insurance-centered, and the health center system was without a new function in the improved economic environment—nothing had been done to reenvision it as the Korean economy had developed.

A fourth element is the high level of competition between health care institutions. After the Korean War, the country was struggling with a lack of financial resources, its economy devastated by the conflict and reliant on foreign aid. Increasing pressure on the national purse strings led to inevitable declines in the quality of facilities and personnel at municipal and provincial hospitals. In response, the doctors at these hospitals opened their own offices, and as more and more newly minted specialists opted to go the same route, the private practices grew into private clinics, clearly establishing themselves as avenues to guide development in the hospital sector. Equipped with beds to allow for admission, the clinics functioned as quasi-hospitals, and as the country's economic growth took off, they were expanded in scale thanks to rocketing real estate value, transforming into regular or general hospitals. As a result, the hospital owners' perspectives differed little from the era of private practice, and a curious competitive environment took root in which health care institutions at every level compete for patients (Committee on the Sixty-Year History of the Korean Economy, 2011).

Fifth, amid a near-total lack of policy intervention in health care services over the years (apart from attempts to control health insurance spending), the Korean public became accustomed to having free choice of their institution or provider. The typical method drew on a tightly woven social network of family members and acquaintances, where people offered medical advice to one another and followed the suggestions of others in choosing an institution or physician. If the strengthening of primary care's coordination function is ultimately about finding a balance between consumer choice and guiding the consumer in a desirable direction, then it could be argued that in the use of Korean health care services today, the balance is drastically tilted in favor of personal choice.

Finally, one other important characteristic of the Korean health care system is a conflict between state and physician, the result of coercive health care interventions by the former on one hand and exclusivity among medical professionals on the other. The typical developmental-era climate favoring efficient decision-making over persuasion and understanding is clearly in evidence in the practice of attempting to rush out solutions to issues of major health care policy—a sort of "implement it first, fix it later" approach (Mun Ok-ryun, 2001). Moreover, physicians' groups, feeling a strong sense of entitlement, saw the strengthening of cost review or separation of prescribing and dispensing drugs not as reasonably grounded policy, but as high-handedness from the state. This perception resulted in a deep-seated sense of victimization, which manifested itself in vigorous opposition to not only state policies with a direct impact on doctors' earnings (e.g., those affecting the payment system), but also a host of others that had no direct effect on the interests of doctors in the private sector. Specific examples of this are discussed below.

2) Recent Efforts in Primary Care Areas

2-A) Restricting the Use of Health Care Services

Introduced in 1989, the medical delivery system copied the British model of rationing health care systems. Large, medium, and small medical zones were established in an effort to coordinate patient flows, with primary care carried out by medium zones according to local city or county units, secondary health care by large zones centered on directly administered (later metropolitan) cities and provinces, and tertiary health care by nationwide large-scale general hospitals. But from the early stages, the policy effort to control the number of patients going straight to higher-level medical institutions without passing through primary or secondary health care was ineffectual. Survey results showed doctors at tertiary health care institutions reporting no change whatsoever in the seriousness of the illnesses of patients visiting them after the change, while referrals were strictly pro forma.

Fundamentally, the reasons for this failure were the intensity of competition between medical institutions and a public unaccustomed to having its choices circumscribed. There was unquestionably a methodological issue with institutions being classified as "primary," "secondary," and "tertiary" according to scale, without any actual functional difference between them; the more important factors, however, were ultimately the patients' unwillingness to accept having their choice controlled or facing potential ill effects from being unable to visit the institution they desired when they were accustomed to having a choice in providers, as well as the institutions' own fear of losing out if they did not issue the referrals their patients wanted.

2-B) Chronic Disease Management System

The recent debate on a chronic disease management system provides a vivid illustration of the conflict between government and providers, as well as the interplay between the public's use of health care services and the market environment. The system, which went into effect in April 2012, reduces the copayment burden from 30 percent to 20 percent on subsequent medical fees after a patient with hypertension or diabetes agrees to continue receiving clinical treatment at a specific clinic. It was introduced to strengthen primary care through an institutional basis for systematic management of chronic disease at local clinics, motivated by a perceived need to improve the treatment rates for those diseases (61.9 percent for hypertension, 59.1 percent for diabetes) and reestablish the functions of clinics as centers for outpatient treatment and of hospitals as centers for inpatient treatment.

But while early discussions included such ideas as patient registration, the submission of patient management charts, and education requirements, the medical community railed against what it called a de facto forced family practitioner system and a prelude to introducing a global budget payment system in the long term. The system that actually ended up being implemented was absent all of these ideas and left only the financial incentives to patients and physicians, thus undermining much of its original aim, namely the management of chronic diseases. Furthermore, in August 2012, four months after the system went into effect, the Korean Medical Association (KMA) made requests to 16 metropolitan and provincial councils to defer participation in the system, and that the councils opted to follow.

Interestingly, the KMA requested deferment not only for this system, but also for a hypertension and diabetes registration/management effort by the Korea Centers for Disease Control and Prevention, which was being carried out with general tax without any direct contention to the national health insurance fund. The doctors' current argument is that they are competing with health centers, and the possibility exists of health centers gaining control over other medical institutions through direct management, such as health center education. This situation shows the clear tendency of the medical community to react in extremely sensitive ways to the possible long-term effects of government policy on controls over the community and the payment system, as well as to oppose related policy measures in general.

Meanwhile, a government analysis of the three-month period after implementation of the clinic-level chronic disease management system showed a 49 percent rate of participation by medical institutions. In addition to showing the ineffectuality of specialist groups at influencing the use of a system incentivizing patients and clinics amid a fiercely competitive market situation, this also arguably demonstrates the need to include patient incentives in any effort to bring about such institutional reforms.

D. Pay for Performance and the Primary Care Knowledge Base for Primary Care

Paternalism generally prevails in social policy, but there are obvious and inescapable limits to coercive measures disregarding the democratic decision-making by which society as a whole is managed. In health care policy as well, countries today face the crucial task of establishing an incentive structure to induce individuals to voluntarily participate in meeting policy goals rather than imposing policy unilaterally from above.

The leading method used to accomplish this is pay for performance (P4P). The aim of P4P is to induce voluntary participation in some desirable policy outcome by offering appropriate compensation. This approach has also been emphasized in policy suggestions to strengthen primary care in Korea (OECD, 2012). However, because its application stands to trigger antipathy, resistance, or defiance by market agents, and because it is unlikely to be effective unless properly designed, a number of prerequisites require consideration.

In particular, the conflict over health insurance claims between insurers (the National Health Insurance Corporation, the Health Insurance Review & Assessment Service, the national government) and providers suggests the strong possibility that immoderate extensions of P4P without the weight of evidence behind them could actually impede health care system improvements. As such, certain preconditions for the system's expansion are in need of resolution. Furthermore, it should also be taken into account that P4P implementation does not automatically guarantee its success, and that the outcomes of P4P in one country cannot simply be generalized to others.

The U.S. Agency for Healthcare Research and Quality (AHRQ) identified 20 areas that require consideration when implementing P4P (AHRQ, 2006). In view of these areas, as well as the aforementioned absence of a structured chronic disease management system or means of its assessment in Korea, effective use of P4P to improve Korean primary care will require ① the setting of clear goals, ② expanding the diseases targeted and the development of indicators for their performance measurement, ③ a computerized system to collect data, and ④ devising appropriate incentive structures and securing their evidence of effectiveness.

5. Proposals for the Advancement of Primary Care

Primary care can be understood on various levels, including its organization and functions, but whatever the definition, whichever of its functions receives emphasis, its ultimate goal is to bring about changes in the health care system to help a greater number of people gain unimpeded access to services and live healthier lives.

Achieving this goal requires, first and foremost, disease prevention, providing adequate treatment so that frequently occurring symptoms do not develop in severity, and ultimately lowering dependence on hospital care and its emphasis on technology and medical equipment. In addition to promoting efficiency in spending, this would also entail consideration for vulnerable segments of the population who are deprived of access to expensive services, as well as efforts to promote quality of life for those who suffer from chronic disease with complex symptoms. As problems of poverty and an aging society intensify amid falling productivity, globalization, and post-industrialization, the need for corresponding changes in the health care system is rapidly growing in importance.

But actually changing the system to carry out these functions most crucially requires us to recognize the inevitability of clashing interests, as these reforms carry with them a strong element of redistributing pieces of the overall health care service pie. Implementing drastic reforms at too rapid a clip could actually end up confounding efforts at improvement.

First, because resources are limited, the biggest obstacle to changing the orientation of the health care system is the resistance of the providers who have staked out stable turf for themselves within the current system. In other countries that have attempted reforms, policy attempts to reduce the amount of resources going toward high expense-generating areas have been thwarted or redirected by objections from groups representing the medical personnel specializing in those areas, while attempts to promote GP use have been stymied by specialists.

Second, opposition or apathy among the public (the actual users of the service) is an important factor in the success of reforms. While health care system reform efforts have the inherent goal of nudging the public in a certain direction in its use of health care services, the strongly developed sense of sovereignty among consumers in the overall economic environment makes them ill-disposed to accept coercive measures or restrictions on their choices. Clear evidence of this policy environment can be seen in the way that Korea's treatment zones and high-level medical institution usage restrictions have been reduced to dead-letter status.

The most crucial element in the success of any policy approach is whether it is able to bring about the envisioned reforms without making the public feel that their selection is being directly constrained. One of the key tasks in primary care reforms is thus to strike a balance between responsiveness (a health care system that meets the public's preferences) and directedness (guiding users and providers alike to meet a consistent policy goal). Earning the support of the public that uses the services is also crucially important in overcoming the objections of interest groups.

Some elements observed in other countries' experience with health care reforms include difficulty passing policies that are too coercive and rushed, the tendency for the initial reform aims to fall by the wayside when the demands of interest groups are met to quiet their objections, and the paramount importance of expanding a knowledge base on the need for reforms and anticipated effects and convincing the public to accept it.

Korea has a very particular situation in this regard: a great need for development of its primary care as its society rapidly ages, as well as formidable obstacles to its strengthening. To begin with, an emphasis on specialists has become deeply rooted since the country's liberation from Japan, and the weakening of community-based public health since the introduction of the national health insurance has aggravated the costliness problem of the health system. The high cost technology focused treatment pattern in hospital services is problematic in its own right, but clinics show no fundamental difference in their costly use of expensive equipment. The issue of strengthening primary care is not merely one of protecting clinics, but one that affects the entire system.

Additionally, conflict between the government and providers has escalated to such a degree that no policy that involves health care services is likely to escape unscathed from a clash of some kind. Furthermore, the fact that members of the public, amid an overall policy vacuum, have become accustomed to unlimited choice on the institution and treatment method for their health care service means that finding the balance between responsiveness and directedness is no easy matter.

As seen in Section Four, indicators such as admission rates for ailments that could have been prevented through primary care, as well as regional disparities in the use of services for chronic diseases, suggest that there are serious problems affecting primary care as a whole. Recent issues with thyroid cancer and spinal surgery also show that the necessary infrastructure for the government to determine the appropriateness of services is not in place, with the result being that services are being used in an utterly uncoordinated fashion.

One fundamental obstacle to improving the situation is the lack of a health care policy role from the authorities (whose main focus has been on controlling the national health insurance spending). This issue includes the absence of clear perception from the government as to what "primary care" should entail—that is, a position from policy authorities on how to usher the health care system in a direction that guarantees greater access and lower long-term costs with limited financial resources— as well as the lack of a knowledge base to undergird a policy vision, the failure to support development of such a knowledge base with policy infrastructure for the gathering and circulation of information, and, as a result, the lack of essential regulations and monitoring to ensure that the health care service market functions properly.

From this standpoint, efforts to strengthen primary care in Korea will require a clear vision for the method of achieving it, including diverse efforts to gather evidence and develop policy tools rather than focusing on the introduction of piecemeal systems. Also, they will require efforts to impress on the public an awareness of the problems and the need for reforms in the services they are used to, using experiences with various new forms of health care services to this end. Because it is a matter of resetting the course of the health care system as a whole, the approach should be incremental and follow a long-term perspective. The most effective efforts in these beginning stages may be public- or private-led, and either top-down, bottom-up, or a mixture of the two.

First, the public sector needs to offer a model for new services serving as an active agent that develops a knowledge base through ongoing observation of the successes and problem areas of these attempts. Given the hardened service usage patterns and preferences among consumers and the development of their education levels and personal networks, this will require creating opportunities to experience the advantages of comprehensive and ongoing disease management and providing a system of incentives, rather than the older methods of coercively imposing methods of use.

Improvements to the service infrastructure in vulnerable regions are also essential. This will require first determining whether regional disparities are present in indicators showing inadequate primary care and whether they are the result of disparities in public infrastructure, and then making policy interventions in the regions that are found to be vulnerable. Such efforts can actually be invested without aggravating the current conflict over health insurance data collection, but they have been neglected over the years amid a single-minded focus on health insurance expenditure control.

At the same time, bottom-up measures from the private sector need to be supported. Even those providers who are not wholly committed to the goal of reforming the health care system but who are determined to generate profits by proactively responding to increased demand for comprehensive and continuous services through new business models or services should be encouraged to do so.

Because the public sector already has an infrastructure (the health center network), it is in a position to spearhead various new approaches, such as integrating prevention, counseling, education, and management, facilitating house calls, night calls, and interdisciplinary cooperation, and devising standard service protocols. It will need to implement a range of pilot efforts to amass information on their strengths and weaknesses, while observing them to see whether they are selected by the public and whether the private sector emulates them in its own efforts.

Creating the possibility for new bottom-up models to be developed by private sector agents will need the relaxation of regulations and financial support. This, for example, refers to the deregulation methods adopted in certain countries, such as waivers from the rigid reimbursement system to enable medical practitioners to demonstrate their own prowess in actual treatment as part of an effort to develop a treatment model that transcends distinctions between chronic and acute disease. In particular, Korea's compulsory designation system, by micromanaging contracts with all providers through a unified price schedule, functions strongly to inhibit creativity and self-motivation among individual practitioners. Other plans should be devised to promote unfettered business models, such as waiving treatment cost reviews in cases where professionals do not exceed the average expenditure, provided they submit treatment information.

Also needed is ongoing observation of trends in all areas of health care services, with a particular emphasis on the importance of policy infrastructure to produce and circulate the necessary knowledge and information when it is needed. The details and results of the various efforts made within public and private infrastructure should be recorded in a database. Assessment tools should also be designed, with observations of user patterns of behavior and satisfaction levels serving as a crucial resource in future institutional design stages. Pay for performance is currently seen as a leading policy measure, but if it is going to produce results, it must be clear what aspects of primary care are to be measured, and content-based efforts are necessary for the establishment a data submission system.

There are fundamental difficulties in strengthening primary care at a time when private infrastructure is so clearly dominant and the prevailing principle in the health care system, with fee-for-service as the primary model of payment, is one of competition among providers. The very concept of comprehensive and continuous health care services is founded in coordination and cooperation, rather than this sort of competition. It is for this reason that we so often see payment system reforms mentioned as a prerequisite for primary care reforms.

But with policy authorities and providers already sharply opposed on the issue of the payment system and payment levels, primary care improvements predicated on a shift in the institutional base such as payment system are very likely to leave the current stalemate intact, making positive results extremely unlikely. The more urgently primary care is in need of strengthening, the more the efforts to achieve this have to start with things that can be attempted inside the current system.

References

AHRQ, *Pay for Performance: A Decision Guide for Purchasers,* AHRQ Publication No. 06-0047, Agency for Healthcare Research and Quality, Rockville, MD., 2006, http://www.ahrq.gov/qual/ p4pguide. Htm

An Hwa-yeong & Park Yeong-ju, "Status and Characteristics of Thyroid Cancer in South Korea," *Korean Journal of Medicine*, Vol. 77, No. 5, 2009, pp. 537--542.

Arevian, Mary, "The Significance of a Collaborative Practice Model in Delivering Care to Chronically Ill Patients: A Case Study of Managing Diabetes Mellitus in a Primary Health Care Center," *Journal of Interprofessional Care*, Vol. 19, No. 5, 2005, pp.444~451.

Atun, R., "What are the Advantages and Disadvantages of Restructuring a Health Care System to be more Focused on Primary Care Services?" London: Health Evidence Network, 2004.

Baicker, Katherine and Amitabh Chandra, "Medicare Spending, The Physician Workforce, and Beneficiaries' Quality of Care," *Health Affairs*, No. 23, 2004, pp.w184~w197.

Bartter, Thaddeus and Melvin R. Pratter, "Asthma: Better Outcome at Lower Cost?: The Role of the Expert in the Care System," *Chest*, Vol. 110, No. 6, 1996, pp.1589~1596.

Blewett, Lynn A. *et al*., "When a Usual Source of Care and Usual Provider Matter: Adult Prevention and Screening Services," *J Gen Intern Med*, Vol. 23, No. 9, 2008, pp.1354~1360.

Bodenheimer, Thomas, Edward H. Wagner, and Kevin Grumbach, "Improving Primary Care for Patients with Chronic Illness," *Journal of the American Medical Association*, Vol.

288, No. 14, 2002, pp.1775~1779.

Boerma, Wienke G. W. and Ana Rico, "Changing Conditions for Structural Reform in Primary Care," in Richard B. Saltman, Ana Rico, and Wienke Boerma (eds.), *Primary Care in the Driver's Seat?: Organizational Reform in European Primary Care*, European Observatory on Health Systems and Policies Series, Open University Press, 2006.

Boerma, Wienke G. W. and Carl-Ardy Dubois, "Mapping Primary Care Across Europe," in Richard B. Saltman, Ana Rico, and Wienke Boerma (eds.), *Primary Care in the Driver's Seat?: Organizational Reform in European Primary Care*, European Observatory on Health Systems and Policies Series, Open University Press, 2006.

Boerma, Wienke G. W., "Coordination and Integration in European Primary Care," in Richard B. Saltman, Ana Rico, and Wienke Boerma (eds.), *Primary Care in the Driver's Seat?: Organizational Reform in European Primary Care*, European Observatory on Health Systems and Policies Series, Open University Press, 2006.

Boon, H. *et al*., "From Parallel Practice to Integrative Health Care: A Conceptual Framework," *BMC Health Services Research*, Vol. 4 No. 15, 2004.

Briggs, C. J., P. Capdegelle, and P. Garner, "Strategies for Integrating Primary Health Services in Middle- and Low-Income Countries: Effects on Performance, Costs and Patient Outcomes (Cochrane Review)," *The Cochrane Library*, No. 1, Oxford: Update Software, 2002.

Calnan, Michael, Jack Hutten, and Hrvoje Tiljak, "The Challenge of Coordination: The Role of Primary Care Professionals in Promoting Integration Across the Interface," in Richard B. Saltman, Ana Rico, and Wienke Boerma (eds.), *Primary Care in the Driver's Seat?:*

Organizational Reform in European Primary Care, European Observatory on Health Systems and Policies Series, Open University Press, 2006.

Cohen, Joshua T., Peter J. Neumann, and Milton C. Weinstein, "Does Preventive Care Save Money? Health Economics and the Presidential Candidates," *N Engl J Med*, Vol. 358, 2008, pp.661~ 663.

Coleman, Katie *et al*., "Evidence on the Chronic Care Model in the New Millennium," *Health Affairs*, Vol. 28, No. 1, 2009, pp.75~85.

Com-Ruelle, Laure, Paul Dourgnon, and Valérie Paris, "Can Physician Gate-keeping and Patient Choice be Reconciled in France? Analysis of Recent Reform," *Eurohealth*, Vol. 12, No. 1, 2006, pp.17~20.

Committee on the Sixty-Year History of the Korean Economy, *The Sixty-Year History of the Korean Economy VI: Social Welfare and Public Health*, 2011.

De Bruin, Simone R. *et al*., "Comprehensive Care Programs for Patients with Multiple Chronic Conditions: A Systematic Literature Review," *Health Policy*, 107, 2012, pp.108~145.

Delnoij, Diana *et al*., "Does General Practitioner Gatekeeping Curb Health Care Expenditure?" *Journal of Health Services Research and Policy*, Vol. 5, No. 1, 2000, pp.22~26.

DeVoe, Jennifer E. *et al*., "A Medical Home Versus Temporary Housing: The Importance of a Stable Usual Source of Care," *Pediatrics*, Vol. 124, No. 5, 2009, pp.1363~1371.

Docteur, Elizabeth and Howard Oxley, "Health-care Systems: Lessons from the Reform Experience," Economics Department Working Papers, No. 374, 2003.

Dourgnon, Paul and Michel Naiditch, "The Preferred Doctor Scheme: A Political Reading of a French Experiment of Gate-keeping," *Health Policy*, Vol. 94, No. 2, 2010, pp.129~134.

Engström, Sven, Mats Foldevi, and Lars Borgquist, "Is General Practice Effective? A Systematic Literature Review," *Scandinavian Journal of Primary Health Care*, Vol. 19, 2001, pp.131~144.

Frances, Craig D. *et al*., "Does Physician Specialty Affect the Survival of Elderly Patients with Myocardial Infarction?" *Health Services Research*, Vol. 35, No. 5, Part Ⅱ, 2000, pp.1093~1116.

Franks, Peter and Kevin Fiscella, "Primary Care Physicians and Specialists as Personal Physicians: Health Care Expenditures and Mortality Experience," *The Journal of Family Practice*, Vol. 47, No. 2, 1998, pp.105~109.

Frenk, Julio, "Reinventing Primary Health Care: The Need for Systems Integration," *Lancet*, Vol. 374, No. 9684, 2009, pp.170~173.

Friedberg, Mark W., Peter S. Hussey, and Eric C. Schneider, "Primary Care: A Critical Review of the Evidence on Quality and Costs of Health Care," *Health Affairs*, Vol. 29, No. 5, 2010, pp.766~772.

Gabbay, J. and A. Stevens, "Toward Investing in Health Gain," *British Medical Journal*, Vol. 308, 1994, pp.1117~1118.

Gerdtham, Ulf-G. and Bengt Jönnsson, "International Comparisons of Health Expenditure: Theory, Data and Econometric Analysis," in Anthony J. Culyer and Joseph P. Newhouse (eds.), *Handbook of Health Economics*, Vol. 1A, Elsevier, 2000, pp.12~53.

Gérvas, Juan and Mercedes Pérez Fernández, "Western European Best Practice in Primary Healthcare," *European Journal of General Practice*, Vol. 12, 2006, pp.30~33.

Geyman, John, *Breaking Point: How the Primary Care Crisis Endangers the Lives of*

Americans, Friday Harbor, WA, 2011.

Glazier, Richard H. *et al*., “Universal Health Insurance and Equity in Primary Care and Specialist Office Visits: A Population-based Study,” *Annals of Family Medicine*, Vol. 7, No. 5, 2009, pp.396~ 405.

Graham, Hilary and Michael P. Kelly, *Health Inequalities: Concepts, Frameworks and Policy*, London: National Health Service/Health Development Agency, 2004.

Gravelle, Hugh, Stephen Morris, and Matt Sutton, “Are Family Physicians Good for You? Endogenous Doctor Supply and Individual Health,” *Health Services Research*, Vol. 43, No. 4, 2008, pp.1128~1144.

Greenfield, Sheldon *et al*., “Outcomes of Patients with Hypertension and Non-insulin-Dependent Diabetes Mellitus Treated by Different Systems and Specialties: Results from the Medical Outcomes Study,” *Journal of the American Medical Association*, Vol. 274, No. 18, 1995, pp.1436~1444.

Greenfield, Sheldon *et al*., “Variations in Resource Utilization Among Medical Specialties and Systems of Care: Results from the Medical Outcomes Study,” *Journal of the American Medical Association*, Vol. 267, No. 12, 1992, pp.1624~1630.

Greß, S. *et al*., “Prospects of Gatekeeping in German Social Health Insurance,” *Journal of Public Health*, Vol. 12, No. 4, 2004, pp.250~258.

Gross, Revital, Hava Tabenkin, and Shuli Brammli-Greenberg, “Who Needs a Gatekeeper? Patients’ Views of the Role of the Primary Care Physician,” *Family Practice*, Vol. 17, No. 3, 2000, pp.222~ 229.

Grumbach, Kevin *et al*., “Resolving the Gatekeeper Conundrum: What Patients Value in Primary Care and Referral to Specialists,” *Journal of the American Medical Association*, Vol. 281, No. 3, 1999, pp.261~266.

Gwatkin, Davidson R., Abbas Bhuiya, and Cesar G. Victora, “Making Health Systems more Equitable,” *Lancet*, Vol. 364, 2004, pp.1273~ 1280.

Harrold, Leslie R., Terry S. Field, and Jerry H. Gurwitz, “Knowledge, Patterns of Care, and Outcomes of Care for Generalists and Specialists,” *J Gen Intern Med*, Vol. 14, No. 8, 1999, pp.499~511.

Health Insurance Review & Assessment Service, *Health Insurance Review and Assessment Statistical Annual* (annual).

Jo Byeong-hui, "National Health Care Controls and the Specialization of Health Care: Historical Background of the Conflict Structure in the Korean Health Care System," *Korean Journal of Sociology*, Vol. 24, Summer, 1992, pp. 131-152.

Johnson, Terence “Imperialism and the Professions: Notes on the Development of Professional Occupations in Britain’s Colonies and the New States,” in Paul Halmos (ed.), *Professionalisation and Social Change*, The Sociological Review Monograph, No. 20, The University of Keele, Stafforshire, 1973, pp.281~309.

Korean Academy of Family Medicine, *Lifelong Health Management of South Koreans*, 3rd ed., 2009.

Kravet, Steven J. *et al*., “Health Care Utilization and the Proportion of Primary Care Physicians,” *The American Journal of Medicine*, Vol. 121, No. 2, 2008, pp.142~148.

Kruk, Margaret Elizabeth *et al*., “The Contribution of Primary Care to Health and Health Systems in Low-and Middle-income Countries: A Critical Review of Major Primary Care Initiatives,” *Social Science & Medicine*, Vol. 70, 2010, pp.904~911.

Kulu-Glasgow, Işık, Diana Delnoij, and Dinny de Bakker, “Self- referral in a Gatekeeping

System: Patients' Reasons for Skipping the General-practitioner," *Health Policy*, Vol. 45, No. 3, 1998, pp.221~238.

Lamarche, Paul A. *et al*., *Choices for Change: The Path for Restructuring Primary Healthcare Services in Canada*, Ottawa: Canadian Health Services Research Foundation, 2003.

Lancry, Pierre-Jean and Simone Sandier, "Rationing Health Care in France," *Health Policy*, Vol. 50, 1999, pp.23~38.

Lisac, Melanie *et al*., "Access and Choice―Competition Under the Roof of Solidarity in German Health Care: An Analysis of Health Policy Reforms Since 2004," *Health Economics, Policy and Law*, Vol. 5, No. 1, 2010, pp.31~52.

Macinko, James, Barbara Starfield, and Leiyu Shi, "The Contribution of Primary Care Systems to Health Outcomes within Organization for Economic Cooperation and Development (OECD) Countries, 1970-1998," *Health Services Research*, Vol. 38, No. 3, 2003, pp.831~865.

Maeng Gwang-ho, "The First Century of Public Health in Korea," *Journal of the Korean Medical Association*, Vol. 8, No. 2, 1999, pp. 127--136.

Marmor, Ted, Richard Freeman, and Kieke Okma, "Comparative Perspectives and Policy Learning in the World of Health Care," *Journal of Comparative Policy Analysis*, Vol. 7, No. 4, 2005, pp.331~348.

Maynard, Alan and Karen Bloor, "Primary Care and Health Care Reform: The Need to Reflect Before Reforming," *Health Policy*, Vol. 31, No. 3, 1995, pp.171~181.

Maynard, Alan, "European Health Policy Challenges," *Health Economics*, Vol. 14, No. 1, 2005, pp.S255~S263.

McCallum, Alison *et al*., “The Impact of Primary Care Purchasing in Europe: A Comparative Case Study of Primary Care Reform,” in Richard B. Saltman, Ana Rico, and Wienke Boerma (eds.), *Primary Care in the Driver’s Seat?: Organizational Reform in European Primary Care*, European Observatory on Health Systems and Policies Series, Open University Press, 2006.

Mullan, F, “The ‘Mona Lisa’ of Health Policy: Primary Care at Home and Abroad,” *Health Affairs*, Vol. 17, No. 2, 1998, pp.118~126.

Mun Ok-ryun, "Status and Tasks for South Korean Health Care Policy Decisionmaking," *Research on Health Security*, Hallym University Health Services Research Center (Ed.), 2001, pp. 35--70.

Mur-Veeman, Ingrid, Arno van Raak, and Aggie Paulus, “Comparing Integrated Care Policy in Europe: Does Policy Matter?” *Health Policy*, Vol. 85, No. 2, 2008, pp.172~183.

OECD, *Divided We Stand: Why Inequality Keeps Rising*, OECD Publishing, 2011a.

OECD, *Health at a Glance 2011: OECD Indicators*, OECD Publishing, Paris, 2011b, accessed 23 April 2012 at http://www.oecd.org/ dataoecd/6/28/49105858.pdf

OECD, *OECD Health Care Quality Review: Korea*, Assessment and Recommendations, 2012.

Olivarius N. F, *et al*., “Self-referral and Self-payment in Danish Primary Care,” *Health Policy*, Vol. 28, 1994, pp.15~22.

Parchman, Michael L. and Steven D. Culler, “Preventable Hospitalizations in Primary Care Shortage Areas: An Analysis of Vulnerable Medicare Beneficiaries,” *Arch Fam Med*, Vol. 8, No. 6, 1999, pp.487~491.

Ricketts, Thomas C. and George M. Holmes, “Mortality and Physician Supply: Does Region

Hold the Key to the Paradox?" *Health Services Research*, Vol. 42, No. 6, Part I, 2007, pp.2233~2251.

Ricketts, Thomas, Michel Naiditch, and Yann Bourgueil, "Advancing Primary Care in France and the United States: Parallel Opportunities and Barriers," *Journal of Primary Care & Community Health*, XX(X), 2012, pp.1~5.

Rico, Ana, Richard B. Saltman, and Wienke G. W. Boerma, "Organizational Restructuring in European Health Systems: The Role of Primary Care," *Social Policy & Administration*, Vol. 37, No. 6, 2003, pp.592~608.

Russell, Louise B., "Preventing Chronic Disease: An Important Investment, But Don't Count on Cost Savings," *Health Affairs*, Vol. 28, No. 1, 2009, pp.42~45.

Saltman, Richard B., "Drawing the Strands Together: Primary Care in Perspective," in Richard B. Saltman, Ana Rico, and Wienke Boerma (eds.), *Primary Care in the Driver's Seat?: Organizational Reform in European Primary Care*, European Observatory on Health Systems and Policies Series, Open University Press, 2006.

Sandy, Lewis G. *et al*., "The Political Economy of U.S. Primary Care," *Health Affairs*, Vol. 28, No. 4, 2009, pp.1136~1145.

Saultz, Jobn W. and Jennifer Lochner, "Interpersonal Continuity of Care and Care Outcomes: A Critical Review," *Annals of Family Medicine*, Vol. 3, No.2 ,2005, pp.159~166.

Schoen, Cathy *et al*., "A Survey of Primary Care Physicians in Eleven Countries, 2009: Perspectives on Care, Costs, and Experiences," *Health Affairs*, Vol. 28, No. 6, 2009, pp.w1171~w1183.

Schoen, Cathy *et al*., "On The Front Lines Of Care: Primary Care Doctors' Office Systems, Experiences, And Views in Seven Countries," *Health Affairs*, Vol. 25, 2006, pp.w555~w571.

Schoen, Cathy *et al*., “Primary Care and Health System Performance: Adults’ Experiences in Five Countries,” *Health Affairs*, 2004, pp.W4-487~W4-503.

Sheaff, Rod, “What is ‘Primary’ about Primary Health Care?” *Health Care Analysis*, Vol. 6, 1998, pp.330~340.

Shi, Leiyu *et al*., “Income Inequality, Primary Care, and Health Indicators,” *The Journal of Family Practice*, Vol. 48, No. 4, 1999, pp.275~284.

Shi, Leiyu *et al*., “Primary Care, Self-rated Health, and Reductions in Social Disparities in Health,” *Health Services Research*, Vol. 37, No. 3, 2002, pp.529~550.

Shi, Leiyu *et al*., “Primary Care, Social Inequalities, and All-cause, Heart Disease, and Cancer Mortality in US Counties, 1990,” *American Journal of Public Health*, Vol. 95, No. 4, 2005, pp.674~680.

Shi, Leiyu *et al*., “The Relationship between Primary Care, Income Inequality, and Mortality in US States, 1980-1995.,” *Journal of the American Board of Family Practice*, Vol. 16, No. 5, 2003, pp.412~422.

Sirovich, Brenda *et al*., “Discretionary Decision Making by Primary Care Physicians and the Cost of U.S. Health Care,” *Health Affairs*, Vol. 27, No. 3, 2008, pp.813~823.

Smeenk, Frank W. J. M. *et al*., “Effects of Transmural Care on Coordination and Continuity of Care,” *Patient Education and Counseling*, Vol. 41, No. 1, 2000, pp.73~81.

Smetana, Gerald W. *et al*., “A Comparison of Outcomes Resulting from Generalist vs Specialist Care for a Single Discrete Medical Condition: A Systematic Review and Methodologic Critique,” *Arch Intern Med*, Vol. 167, No. 1, 2007, pp.10~20.

Starfield, Barbara *et al*., “The Effects of Specialist Supply on Populations’ Helath: Assessing

The Evidence," *Health Affairs*, 2005, pp.w5-97~w5-107.

Starfield, Barbara, "Is Primary Care Essential?" *Lancet*, Vol. 344, No. 8930, 1994, pp.1129~1133.

Starfield, Barbara, "Reinventing Primary Care: Lessons from Canada for the United States," *Health Affairs*, Vol. 29, No. 5, 2010, pp.1030~1036.

Stevens, Simon, "Reform Strategies for the English NHS," *Health Affairs*, Vol. 23, No. 3, 2004, pp.37~44.

Sutton, Matt and Gary McLean, "Determinants of Primary Medical Care Quality Measured Under the New UK Contract: Cross Sectional Study," *BMJ*, Vol. 332, 2006, pp.389~390.

Tabenkin, H. and Revital Gross, "The Role of the Primary Care Physician in the Israeli Health Care System as a 'Gatekeeper'— The Viewpoint of Health Care Policy Makers," *Health Policy*, Vol. 52, No. 2, 2000, pp.73~85.

Tsai, Alexander C. *et al*., "A Meta-analysis of Interventions to Improve Care for Chronic Illnesses," *Am J Manag Care*, Vol. 11, No. 8, 2005, pp.478~488.

Van Doorslaer, Eddy, Xander Koolman, and Andrew M. Jones, "Explaining Income-related Inequalities in Doctor Utilization in Europe: A Decomposition Approach," *Health Economics*, Vol. 13, No. 7, 2004, pp.629~647.

Vuori, Hannu, "Health for All, Primary Health Care and General Practitioners," *Journal of the Royal College of General Practitioners*, Vol. 36, Keynote Address, WONCA, 1986, pp.398~ 402.

Vuori, Hannu, "Primary Health Care in Europe—Problems and Solutions," *Community Medicine*, Vol. 6, 1984, pp.221~231.

Weiss, Linda J. and Jan Blustein, "Faithful Patients: The Effect of Long-term Physician-patient Relationships on the Costs and Use of Health Care by Older Americans," *American Journal of Public Health*, Vol. 86, No. 12, 1996, pp.1742~1747.

White, Joseph and Theodore R. Marmor, "Primary Care and Health Reform Concepts, Confusions, and Clarifications," in Theodore R. Marmor, Richard Freeman, and Kieke G. H. Okma(eds.), *Comparatives Studies and the Politics of Modern Medical Care*, New Haven, CT: Yale University Press, 2009, pp.180~201.

White, K. *et al*., "The Ecology of Medical Care," *N Engl J Med*, Vol. 265, 1961, pp.885~93.

WHO, *World Health Report 2008: Primary Health Care, Now More Than Ever*, Geneva: WHO, 2008.

Young, F. W., "An Explanation of the Persistent Doctor-mortality Association," *Journal of Epidemiology and Community Health*, Vol. 55, No. 2, 2001, pp.80~84.

Zgibor, Janice C. *et al*., "Influence of Health Care Providers on the Development of Diabetes Complications: Long-term Follow-up from the Pittsburgh Epidemiology of Diabetes Complications Study," *Diabetes Care*, Vol. 25, No. 9, 2002, pp.1584~1590.

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