
13. Economic Development and Human Capital Formation in Korea



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1 INTRODUCTION

Human Capital in Korea

- For a long-term growth, a range of types of human capital embodied in a range of unskilled, skilled, and professional workers are needed

A large number of literate workers	Middle-level managers and supervisors	People who have talents to learn new ideas
	Discoverers and innovators	Top leaders for the whole society

- Vertical and horizontal mobility with level playing fields
- Individual and collective values in Korean society
- Korean societal collectivist values
- Confucian values in Korea

Q) How Korea has built up human capital through both public and private investments in education to support economic development?

2 Human Capital Formation and Its Role in Korean Economic Development

2.1 Initial Conditions

Korea: Initial Educational Attainment

		1945	1953	1960	1970
Literacy (%)			22	72.1	88.4
Enrolment Rates (%)	Primary Schools		59.6	86.2	102.8
	Junior High Schools		21.1	33.3	53.3
	Senior High Schools		12.4	19.9	29.3
	Colleges		3.1	5.0	8.7
Number of Schools	Primary Schools	2,834		4,496	5,967
	Junior High Schools	166		1,053	1,608
	Senior High Schools	307		640	889
	Colleges	19		85	232

Korea: Evolution of the Demographic Composition of the Population

Age Distribution of the Population (Millions of Persons)

	Population (Millions of Persons)	0-14 Years	Change in the 0-14 (Millions of Persons)	Population* (% of 0-14 Population)	15-64 Years	65+ Years
1947	19.9	7.8		39.3	57.2	3.5
1956	20.7	8.3	0.5	40	54.2	5.8
1961	25.8	11.1	3.3	43	54.1	2.9
1966	29.4	12.9	5.1	43.8	53	3.2

- Independence and liberation with new hope expands private decisions in education

2 Human Capital Formation and Its Role in Korean Economic Development

2.2 Expansion of Education

- Changes in Quantity and Quality of education

Korea: School Enrollment

(%)

	Primary		Junior High		Senior High		Higher Education	
	Male	Female	Male	Female	Male	Female	Male	Female
<u>EPB (1979, 88-89)</u>								
1960*	90.1		30.0		18.8		6.0	
1966	98.1	95.1	51.0	32.9	35.0	19.6	14.0	5.1
1970	102.9	101.9	65.1	46.6	36.7	24.1	14.6	5.5
<u>NSO (1996, 206)</u>								
1970	101.1	100.2	61.1	40.6	34.2	21.6		
1975	104.7	105.3	80.1	63.1	49.0	32.5		
1981	102.9	103.8	98.3	95.3	77.0	63.0		
<u>NSO (2006, 278)</u>								
1981	98.5	99.0	76.6	73.6	58.6	49.1	20.4	8.7
1990	100.1	101.0	91.2	92.0	81.4	77.2	26.5	19.0
1998	97.0	98.5	93.7	94.7	88.9	88.5	51.0	42.3
2000	96.7	97.8	94.3	95.8	89.5	89.4	54.2	46.1
2006	98.7	98.9	95.7	96.6	92.9	93.3	66.3	60.5

2 Human Capital Formation and Its Role in Korean Economic Development

2.2 Expansion of Education

- Changes in Quantity and Quality of education

Korea: Indicators of Educational Quality and Investment in Education

	Number of Students Per Teacher		Class Size	
	Primary School	Senior High School*	Primary School	Senior High School*
<u>EPB (1979, 97, 104)</u>				
1952			62.6	34.8
1966	60.82	32.9	65.2	59.6
1970	56.87	32.0	62.1	60.1
1975			57.2	59.8
1978			53.0	59.5
<u>KSO (1996, 220)</u>				
1980			51.5	59.9
1985			44.7	58.0
1990			41.4	53.6
1995			36.4	48.0
<u>KSO (2006, 290, 296)</u>				
1975	51.8	31.7		
1980	47.5	33.9		
1985	38.3	31.6		
1990	35.6	25.4		
2000	28.7	20.9	35.8	44.1
2006	24.0	15.8	30.9	33.7

2 Human Capital Formation and Its Role in Korean Economic Development

2.2 Expansion of Education

- Vocational Training

Korea: Expansion of Vocational Training

(1,000 Persons)

	Public Vocational Training		In-plant Training	
	Total	Annual Average	Total	Annual Average
1967-1971	36.3	7.3	48.2	9.6
1972-1976	81.3	16.3	117.3	23.5
1977-1981	120.1	24.0	337.4	67.5
1977-1978	81.3	40.6	177.4	88.7
1979-1981	38.8	12.9	160.0	5.3

- meet the demand for manpower required for industrial employment

2 Human Capital Formation and Its Role in Korean Economic Development

2.2 Expansion of Education

Korea: Spending on Education

	Annual Public Spending on Education (Millions of Won, 1950-60; Billions of Won, 1964-85)		Annual Urban Household Spending on Education (1,000 Won) (% of Consumption Spending)		Public Spending on Education (% of GDP)
	Education Budget	GDP*	(1,000 Won)	(% of Consumption Spending)	
EPB (1979, 110-111)					
1950	13.8				
1960	6,331	244,900			2.6
1964			5.2	5.0	
1970	78.5	2,764	23.8	6.6	2.8
1978	616.4	24,745	84.7	5.5	2.5
EPB (1986, Tables 4-3, 4-14)					
1967	32.1	2,764	13.9	5.6	
1970	78.5	38,775	23.8	6.6	2.8
1980	1,099.2	84,061	135.3	5.2	2.8
1985	2,491.7		296.2	6.2	3.0

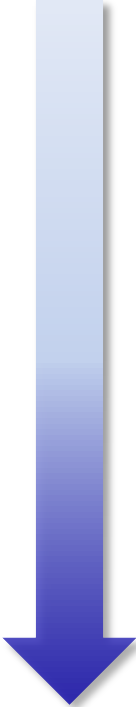
	Annual Public Spending on Education (1,000 of Won Per Student)			Annual Urban Household Spending on Education (1,000 Won) (% of Consumption Spending)		Public Spending on Education (% of GDP)
	Primary School	Senior High School	University	(1,000 Won)	(% of Consumption Spending)	
NSO (1996, 226-227)						
1970				22	7.2	5.2
1975				47	6.8	3.8
1980				126	5.8	5.3
1985				280	7.4	5.6
1990				665	8.1	4.7
1995				1,484	9.8	5.5
NSO (2006, 302-303, 305)						
1986				313	7.5	5.2
1990	566	787	1,916	665	8.1	4.6
1996	1,671	2,022	4,846	1,747	10.2	5.1
1997	2,034	2,500	5,273	1,903	10.6	5.5
1998	2,183	2,361	5,004	1,771	11.2	5.7
2000	2,023	2,841	5,591	2,139	10.9	5.4
2004	3,349	5,345	7,489	2,783	11.5	6.2
2006	3,798	5,873	7,632	3,048		


- Long-term orientation and Confucian values

3 The Korean Educational System and Its Reforms

3.1 The present Education System and Its Origin

- Korean education system
 - A centralized, top-down system under strict central government control
 - Disparities between urban and rural areas

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- Kindergartens (1 to 2 year pre-school education)
 - Primary schools (6 year education)
 - Secondary schools (6 year education)
 - Middle schools (3 year education)
 - High schools (3 year education)
 - Colleges (2 to 4 year higher education)
 - Junior colleges (2 year education)
 - Universities (4 year education)
 - * Specialized education colleges and training programs
 - * Vocational schools
 - Graduate schools

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- A compulsory primary education system (1945~1960)

3 The Korean Educational System and Its Reforms

3.2 Meeting the Demand for Manpower at All levels

- Training for Industrial workers
 - **The government** strengthened technology education at both college and high school levels and instituted a system of national certification of technicians at the same time
 - Industrial manpower development
 - Established the Ministry of Science and Technology (MOST)
 - Enacted several Vocational Training Law (1967, 1974, 1976)
 - **The private firms** enhanced human capital formation through the import of foreign technology
 - Technology transfers
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3 The Korean Educational System and Its Reforms

3.3~3.4 The Expansion of Education

- Rising Demand for Broader opportunities for Higher-quality University Education
 - Increasing college enrolment quotas
 - The number of college students (598,000 in 1980 to 1.5 million in 1990)
 - Other Problems
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4 Conclusions, Lessons, and Questions

Conclusion

- Based on both government policy and Korean traditional values, human capital could have developed
- “*Humans were born equal*” from Yi Dynasty
- Rapid improvements in educational attainments from openness and fairness
- A positive role of education in promoting technical progress

Issues

1) public education expenditure vs. private education expenditure

1) Korean society has not valued diversity, dissenting views and non-conformity

2) The gender implications of the Confucian legacy



Thank you for listening!