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**SUSTAINING GROWTH IN KOREA BY REFORMING THE LABOUR MARKET AND IMPROVING
THE EDUCATION SYSTEM**

ECONOMICS DEPARTMENT WORKING PAPER No. 672

By

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ABSTRACT/ RÉSUMÉ

Sustaining growth in Korea by reforming the labour market and improving the education system

A well-functioning labour market is essential to sustain rapid economic growth in the face of population ageing. Priorities are to reverse the rising share of non-regular workers, which has negative implications for both growth and equity, and encourage greater employment of women and youth, who are under-represented in the labour force. Attracting more women to employment requires increasing the availability of childcare, strengthening maternity leave and creating more family-friendly workplaces. Youth employment rates should be boosted by upgrading tertiary education through stronger competition and closer links to enterprises to reduce mismatches. Educational reform should be extended to elementary and secondary schools to enhance efficiency and decrease the burden of private tutoring. The age of retirement of employees should be raised by eliminating mandatory retirement and phasing out the retirement allowance. Active labour market policies should focus on policies to expand human capital rather than wage subsidies.

This Working Paper relates to the 2008 *OECD Economic Surveys: Korea* (www.oecd.org/eco/surveys/Korea).

JEL classification: J11, J3, J5, J7

Keywords: Korea; labour market; dualism; employment protection; non-regular workers; participation rates; female employment; older workers; fertility rates; youth employment; education reform; company pensions; retirement allowance; seniority-based wages

Soutenir la croissance en Corée en réformant le marché du travail et en améliorant le système d'éducation

Un marché du travail performant est indispensable au maintien d'une croissance économique rapide face au vieillissement de la population. Les objectifs prioritaires consistent à inverser l'augmentation de la part des travailleurs non réguliers, qui a des conséquences négatives à la fois pour la croissance et pour l'équité, et d'encourager une progression de l'emploi des femmes et des jeunes, qui sont sous-représentés dans la population active. Pour attirer davantage de femmes dans l'emploi, il faut accroître l'offre de services d'accueil des enfants, améliorer la situation en matière de congés de maternité et faire en sorte qu'il y ait davantage de lieux de travail où les obligations familiales sont prises en compte. Les taux d'emploi des jeunes devraient être favorisés en améliorant l'enseignement tertiaire grâce à un renforcement de la concurrence et à un resserrement des liens avec les entreprises afin de réduire les inadéquations. La réforme de l'éducation devrait être étendue aux établissements élémentaires et secondaires de façon à améliorer l'efficacité et à diminuer la charge représentée par les cours de soutien privés. L'âge de départ à la retraite des salariés devrait être relevé en éliminant la retraite obligatoire et en supprimant progressivement l'indemnité de retraite. Dans le cadre des politiques actives du marché du travail, il faudrait privilégier le renforcement du capital humain plutôt que le versement de subventions salariales.

Ce Document de travail se rapporte à l'Étude économique de l'OCDE de Corée, 2008 (www.oecd.org/eco/etudes/corée).

Classification JEL : J11, J3, J5, J7

Mots clés : Corée; le marché du travail; dualisme; protection de l'emploi; travailleurs non réguliers; taux d'activité; l'activité des femmes; travailleurs âgés; taux de fécondité; youth employment; education reform; company pensions; retirement allowance; seniority-based wages

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SUSTAINING GROWTH IN KOREA BY REFORMING THE LABOUR MARKET AND IMPROVING THE EDUCATION SYSTEM

by Randall S. Jones and Masahiko Tsutsumi¹

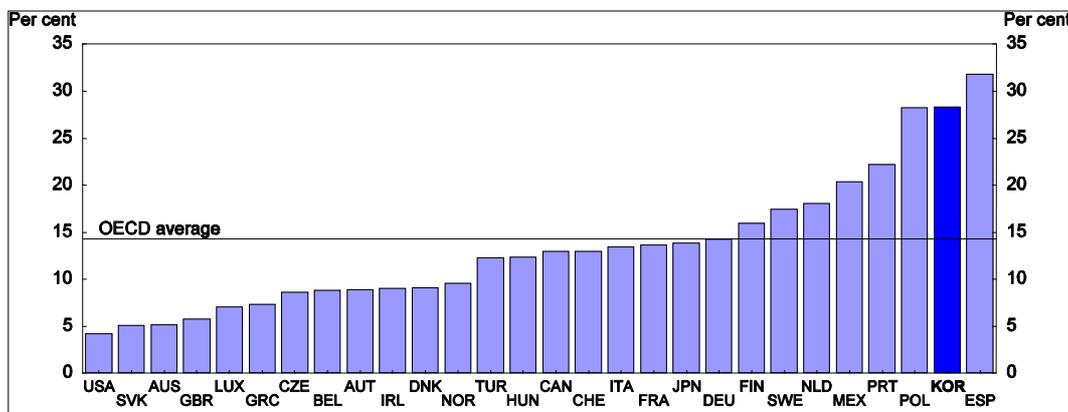
1. Rapid employment growth, low unemployment and sustained gains in human capital have contributed substantially to Korea's economic development. However, traditional labour market institutions that had been successful in the past are no longer appropriate. Korea's integration in the world economy and technological change call for greater flexibility and increased human capital, while population ageing makes it essential to boost the relatively low participation rates of prime-age women and youth and raise the retirement age of employees. Achieving these objectives requires reforms in the labour market, social welfare policies and the education system. In sum, the framework should give firms incentives to employ regular workers, thus limiting labour market dualism, while encouraging more women and youth to accept employment and extending the working life of employees. At the same time, education should be upgraded to enhance the employability of young people and to promote human capital.

2. This paper first addresses the problem of labour market dualism, which is detrimental to both growth and equity. It then analyses the low employment rates of women and youth to identify policies conducive to greater participation, including education reforms. The challenge of keeping older workers in employment is examined in the fourth section. The paper concludes with a summary of the key recommendations shown in Box 2.

Reversing labour market dualism: regular versus non-regular workers

3. A major problem in the labour market is the rising degree of dualism: the share of non-regular workers (Box 1) exceeds one-third of employees (Table 1). The largest category of non-regular employment is temporary workers (Panel B), despite long-standing restrictions on fixed-term contracts. The increase in the share of temporary workers, from 16.6% of employment in 2001 to 29.7% in 2004, was the fastest in the OECD area and its share was the second highest in the OECD in 2007 (Figure 1). The high proportion of temporary workers is a drag on growth as it increases worker turnover and hence reduces firm-provided training, which plays a very important role in Korea (Chung and Lee, 2005). It also raises equity issues as non-regular workers face precarious jobs, wage discrimination and less social protection.

1. Randall S. Jones is head of the Japan/Korea Desk in the Economics Department of the OECD and Masahiko Tsutsumi is an economist on that desk. This paper is based largely on material from the *OECD Economic Survey of Korea* published in December 2008 under the authority of the Economic and Development Review Committee (EDRC). The authors would like to thank Andrew Dean, Robert Ford, Vincent Koen and Gregory Wurzburg for valuable comments on earlier drafts. Special thanks go to Lutécia Daniel for technical assistance and to Nadine Dufour for technical preparation.

Figure 1. International comparison of temporary employmentAs per cent of total employment in 2007¹

1. Reference year is 2004 in Mexico, 2005 in the United States and 2006 in Australia.

Source: OECD Employment Outlook Database.

Box 1. Definition of non-regular workers

The definition of “non-regular” workers in Korea is broader than that of temporary workers used by the OECD. Temporary workers include employees under fixed-term contracts, seasonal workers and temporary agency jobs. Although the term non-regular worker is widely used in Korea, there is no consensus on its definition, which is generally based on; *i*) the term of contract (definite or indefinite) and continuity of employment; *ii*) working hours; and *iii*) the type of relationship with the firm. The Economic and Social Development Commission (formerly the Tripartite Commission, which includes the government and social partners) defines non-regular workers as:

- *Contingent workers* (22.3% of employees): those with fixed-term contracts or who expect their work arrangement to have a limited duration for involuntary reasons. This category corresponds to the OECD definition of temporary workers.
- *Part-time workers* (7.6%): those who work “fewer hours” than full-time workers.
- *Atypical workers* (13.9%): temporary agency workers (dispatched workers), individual contract workers (who work independently of the firm), home-based workers, on-call workers and other new forms of employment.

By this definition, the share of non-regular workers rose from 27% in 2001 to 36% in 2007 (accounting for overlap between the three categories). Some experts argue that the rate is as high as 57%. In any event, it is higher than the number of temporary workers under the OECD measure.

Table 1. Non-regular and temporary workers in Korea**A. Non-regular workers as a per cent of total employment by age and gender in 2005**

	15-19	20-29	30-39	40-49	50-59	60 and over	Total
Males	78.3	32.0	25.3	29.2	35.0	60.0	31.5
Females	64.1	33.4	40.1	46.7	55.2	75.7	43.7

B. Temporary workers as a per cent of total employment

	2001	2002	2003	2004	2005	2006	2007
Workers with a fixed-term contract of:							
Less than one month	5.6	5.2	6.7	5.6	5.5	5.2	3.2
Between one month and one year	2.8	2.7	4.9	4.7	4.8	4.9	4.7
One year	1.5	1.9	3.3	4.4	5.3	5.0	5.4
Between one year and three years	0.6	0.6	1.3	1.7	1.8	1.7	1.4
Over three years	0.5	0.6	0.7	0.8	0.8	0.9	1.2
Sub-total	11.0	10.9	17.0	17.1	18.2	17.7	15.9
Workers with open-ended contract but who could be dismissed against their own will	2.9	3.8	4.3	7.6	5.9	5.9	6.4
Temporary agency workers (dispatched workers)	1.0	0.7	0.7	0.8	0.8	0.9	1.1
On-call workers	2.2	2.9	4.2	4.6	4.8	4.3	5.3
Total ¹	16.6	18.1	25.9	29.7	29.4	28.3	28.2
Ratio of fixed-term contract workers to total	66.3	60.2	65.6	57.6	61.9	62.5	56.4
Total wage workers (1 000 persons)	13 540	14 030	14 149	14 584	14 968	15 351	15 882

1. The total is adjusted for overlapping between sub-categories. Hence, it is not equal to the sum of the sub-categories.

Source: Korea National Statistical Office, EAPS Supplementary Survey by Type of Employment (every August).

4. Temporary employment in Korea is unique in several respects:

- The proportion of temporary workers who are employed part-time is only 14% compared with 30% to 50% in other OECD countries. This indicates that temporary jobs are less related to the need for working-time flexibility, particularly for women, than elsewhere.
- The incidence of temporary workers is high among all age groups in Korea, in contrast to other OECD countries, where it is concentrated among youth (Table 2). The high proportion for older workers is linked to the young age of mandatory retirement in many firms.
- Temporary workers in Korea are highly concentrated in the service sector, while the proportion in manufacturing and the primary sector is similar to the OECD average (Panel B).

As in other OECD countries, the incidence of temporary work is concentrated in small companies (Panel C) and among workers with low and medium levels of education (Panel D).

5. The hourly wages of non-regular workers fell from 80% of regular workers' in 2001 to 71% in 2007. The widening gap reflects differences in job tenure and an increase in the human capital of regular workers, who have greater access to on-the-job training. However, the monthly wages of non-regular workers have remained around 63% of regular workers', reflecting a rise in working hours. Discrimination accounts for a significant portion of the wage gap according to a number of studies. For example, the Korea Employers Federation (2006) estimated that the productivity of non-regular workers is 22% below that of regular workers, while their wages are 44% less. Jeong (2003) found that non-regular workers are

paid 20% to 27% less than regular workers, after adjusting for age, experience, education and other attributes. Ahn (2006) reported that 23% of the wage gap is explained by discrimination against non-regular workers.²

Table 2. A comparison of temporary workers in Korea and the OECD

A. By age (%)					
	15-24	25-54	55+		Total
Korea in 2005	36.1	26.2	46.1		29.4
OECD in 2005	32.7	10.4	10.4		12.8
B. By industry (normalised by distribution¹)					
	Primary	Manufacturing	Services	Services/Manufacturing	Total
Korea in 2005	1.8	2.6	25.0	9.5	29.4
EU-15 average in 2005	1.5	3.4	9.8	2.9	14.7
OECD average in 2000	1.5	2.5	8.0	3.3	12.0
C. By firm size (normalised by distribution¹)					
	Less than 10 persons	10-29 persons	30-99 persons	100 persons and over	Total
Korea in 2005	16.4	5.8	4.0	3.2	29.4
	Less than 20 persons	20-49 persons		50 persons and over	Total
EU-15 average in 2005	7.3	2.3		5.1	14.7
OECD average in 2000	7.4	1.6		3.0	12.0
D. By educational attainment (normalised by distribution¹)					
	Low	Medium	High	Low/High	Total
Korea in 2005	12.1	12.4	4.9	2.4	29.4
EU-15 average in 2005	7.7	4.2	2.8	2.8	14.7
OECD average in 2000	5.5	4.6	1.9	2.9	12.0

1. The figure for each category is its contribution to the total incidence of temporary workers.
Source: Grubb *et al.* (2007).

The policy response to labour market dualism

6. The government is concerned that labour market polarisation could undermine national competitiveness, weaken social cohesiveness and put strains on the social safety net. Therefore, it has expanded active labour market policies for non-regular workers to improve their employability³ and taken steps to increase their coverage by the social safety net. In addition, the government has enacted a law to protect non-regular workers from “undue discrimination” and avoid their “excessive use”:

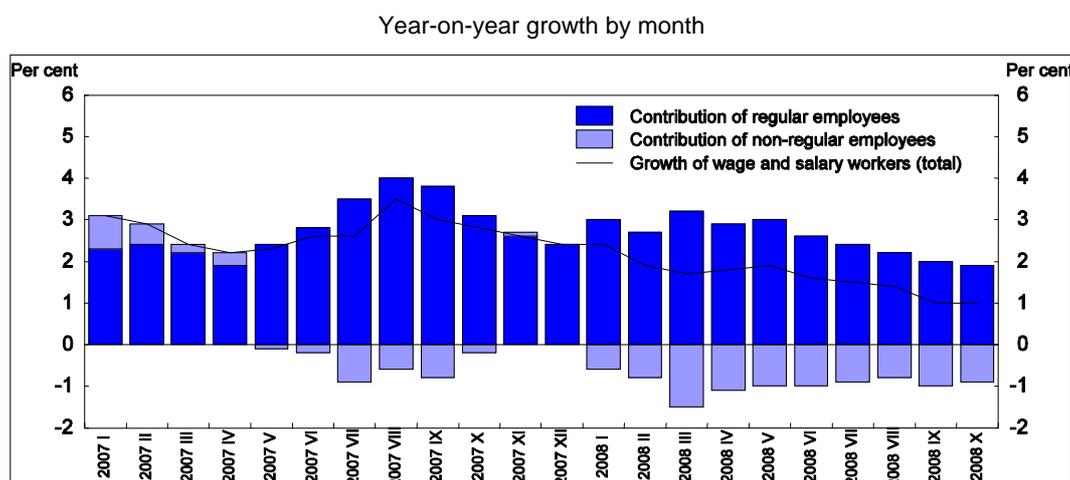
- “Unjustifiable discriminatory practices” against non-regular workers are prohibited. Employees claiming discriminatory working conditions or wages can submit complaints to the Labour Relations Commission, where firms must prove that their practices are not discriminatory. This provision was implemented in companies with at least 300 employees in July 2007 and those with 100 to 299 employees in July 2008. It will be extended to smaller companies from July 2009.

-
2. However, Nam (2007) found that the 37% wage differential decreases to 2.2% if attributes of workers are controlled. Using panel data, he also concluded that there is no difference between the hourly wages of regular and non-regular workers.
 3. Expenditures on vocational training for SMEs and non-regular workers increased from 75 billion won in 2006 to 117 billion in 2007, and the number of workers trained from 3 000 to 37 000.

- Since July 2007, workers with fixed-term contracts in all firms regardless of size are considered to be regular employees after two years of work.

7. The 2007 *OECD Economic Surveys: Korea* cautioned that prohibiting discrimination against non-regular workers may subject firms to costly and time-consuming litigation that would discourage the employment of non-regular workers and lead to higher unemployment. By February 2008, 800 cases involving 2 793 non-regular workers who had filed complaints under the new law had been settled. The Labour Relations Commission, a public mediator, imposed correction orders in two-thirds of the cases. The high proportion of correction orders is likely to encourage non-regular workers to file cases while putting pressure on firms to improve the employment conditions of non-regular workers or to terminate their contracts. While it is too early to judge, monthly employment data show that non-regular employment has had a negative impact on total employment since the law began to take effect in mid-2007 (Figure 2). This suggests that even smaller companies have responded to the new law by scaling back their number of non-regular workers or transforming them into regular workers.⁴ The government contributed to this trend by shifting 67 000 non-regular workers in the public sector to regular status in mid-2007. In addition, some firms are outsourcing work done by non-regular workers to other firms. Labour market trends should be closely monitored as this law is implemented.

Figure 2. Contribution to employment growth by status of workers



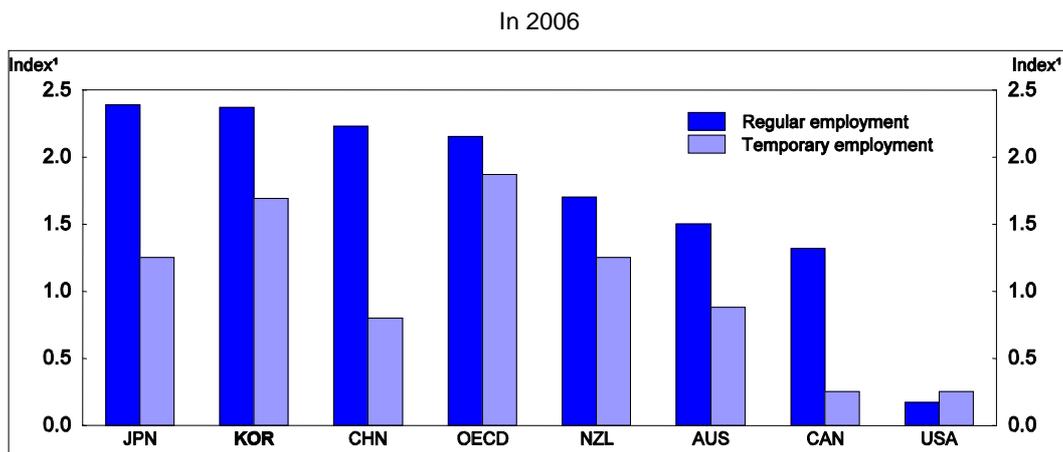
Source: Korea National Statistical Office.

8. According to surveys, firms hire non-regular workers to reduce labour costs and to increase employment flexibility, given the difficulty of laying off regular workers due to the high degree of employment protection and the power of trade unions in large firms (2007 *OECD Economic Surveys: Korea*). The revision of the labour law in 1998 to allow collective dismissals for “urgent managerial reasons” has not sufficiently enhanced flexibility in practice. This reflects the attached conditions, notably that firms must exhaust “all means” to avoid dismissals, discuss proposed dismissals for at least two months (recently reduced to 50 days) with workers and notify the government. Given these constraints, firms have relied on more expensive methods to reduce employment, such as early retirement packages and incentives for voluntary departures. According to the OECD indicator, employment protection for regular workers in Korea in 2006 was slightly above China and the OECD average, and far above English-

4. According to a survey by the Ministry of Labour in 2008, 16% of firms were planning to turn to temporary worker agencies and outsourcing, while 21% said they had reduced non-regular jobs and 18% planned to do so. About 20% of firms had converted non-regular workers into regular status. Another survey by the Korea Employers Federation reported that about 40% of firms cut or planned to cut non-regular workers while only 19% of them would hire regular workers to fill those vacancies (KOILAF, 2008b).

speaking OECD countries (Figure 3).⁵ OECD studies show that countries with stricter protection for regular workers tend to have a higher incidence of temporary employment (Grubb *et al.*, 2007). To reduce the incentives to hire non-regular workers, past *OECD Economic Surveys: Korea* have recommended that employment protection for regular workers be relaxed. Korea's approach of raising its protection for non-regular workers, which in 2006 was slightly below the OECD average, risks reducing overall employment.

Figure 3. International comparison of employment protection legislation



1. Index scale of 0 to 6 from least to most restrictive in 2006.
Source: OECD (2008c), *Going for Growth, 2008*, OECD, Paris.

9. The liberalisation of employment protection should be accompanied by a strengthening of the social safety net. Although the proportion of wage and salary earners covered by the Employment Insurance System (EIS) has increased sharply since the mid-1990s to 56.8% in 2007, it still leaves a substantial portion of the labour force unprotected (Table 3). Gaps in coverage are concentrated among non-regular workers; the share of such workers participating in the EIS, as well as the National Pension Scheme (NPS) and the National Health Insurance (NHI), is around 40%, only one-half of the share for regular workers (Panel B). Part of the gap reflects differences in the law. For example, both the NPS and NHI exclude daily workers, while some part-time workers are also not covered. However, the wide gap in coverage is also due to weak compliance, particularly among workers in small firms.

10. The lower coverage of non-regular workers by the social insurance systems reduces their cost relative to regular workers, strengthening the incentive of firms to hire them. Increasing the coverage of non-regular workers would thus help narrow the gap and weaken the incentive. While the coverage of social insurance is on an upward trend, further steps are required to boost compliance, notably by integrating the collection of contributions. In sum, it is essential to relax employment protection for regular workers and broaden the social insurance coverage of non-regular workers in order to reduce labour market dualism and its negative effect on growth and equity.

5. In addition, the World Bank study *Doing Business 2008* ranks Korea 27th among OECD countries in the category "Employing workers", which includes the cost of dismissing a redundant worker.

Table 3. Employment insurance systems in Korea**A. Coverage of the Employment Insurance System**

Thousand employees and per cent

	1995	2000	2001	2002	2003	2004	2005	2006	2007
Wage and salary earners	12 899	13 142	13 659	14 181	14 402	14 894	15 185	15 551	15 970
Eligible for EIS	4280	8 700	9 269	9 269	9 651	10 037	10 330	10 803	11 115
Actually insured	4204	6 747	6 909	7 171	7 203	7 577	8 064	8 537	9 063
Eligible as a per cent of wage and salary earners	33.2	66.2	67.9	65.4	67.0	67.4	68.0	69.5	69.6
Insured as a per cent of eligible workers	98.2	77.6	74.5	77.4	74.6	75.5	78.1	79.0	81.5
Insured as a per cent of wage and salary earners	32.6	51.3	50.6	50.6	50.0	50.9	53.1	54.9	56.8
Proportion of unemployed receiving benefits			15.1	16.6	18.5	22.4	25.6	30.0	34.8

B. Coverage of the social insurance systems by type of worker¹Error! Bookmark not defined.

Regular workers (per cent of total)	2003	2004	2005	2006	2007
National pension	70.8	72.5	75.7	76.1	76.3
National health insurance	72.5	73.8	75.9	76.1	76.7
Employment insurance	59.7	61.5	63.8	64.7	64.3
Non-regular workers (per cent of total)					
National pension	30.5	37.5	36.6	38.2	40.0
National health insurance	32.6	40.1	37.7	40.0	42.5
Employment insurance	29.2	36.1	34.5	36.3	39.2

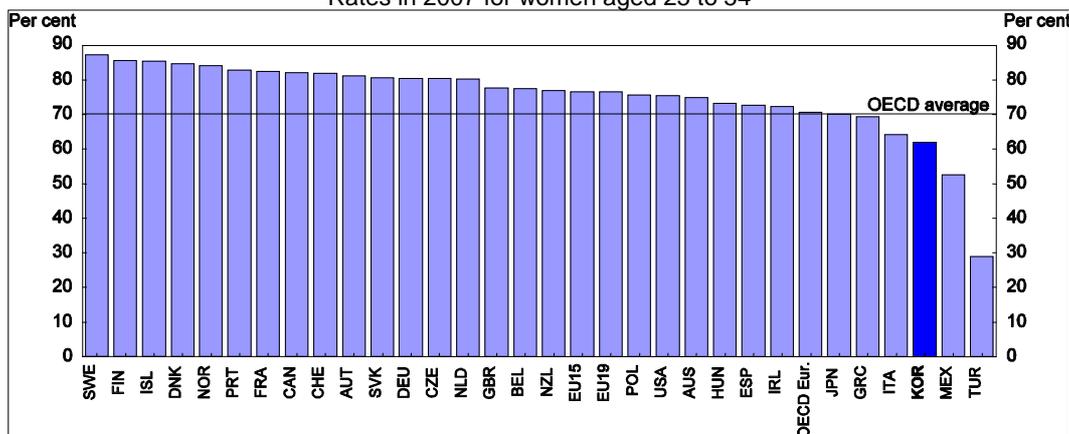
1. This survey-based data does not match the records of the social insurance systems. For example, while the number of workers covered by the EIS based on the survey is around 8 million, the Ministry of Labour reported that more than 9 million were covered in 2007.

Source: Ministry of Labour and Korea National Statistics Office, "Supplementary Survey on Economically Active Population".

Raising the female labour force participation rate

11. The participation rate for prime-age women (25 to 54) is the third lowest in the OECD area, at 62%, and well below the OECD average of 70% (Figure 4). Moreover, female employment rates lag behind those for males in each category, leading to an employment gender gap that is the seventh highest in the OECD area. The female participation rate is limited by the fact that a significant share of women withdraw from the labour force at the time of marriage or childbirth, although many later return, resulting in an M-shaped participation curve (Figure 5). Boosting female employment is a key to mitigating the impact of rapid population ageing. The total female participation rate rose from 49% in 1990 to 55% in 2007, mainly due to the changing behaviour of younger women. In particular, the rate for the 25-to-29 age group has doubled from 32% for women born during the first half of the 1950s to 65% for women born during the second half of the 1970s, reflecting the trend toward later marriage. In contrast, the rate at the second peak, which occurs for the 40-to-44 age group, has remained around 63% for successive cohorts born since 1951. A related issue is the significant drop in the fertility rate, which has fallen as the participation rate for young women has risen

Figure 4. International comparison of female labour force participation rates
Rates in 2007 for women aged 25 to 54

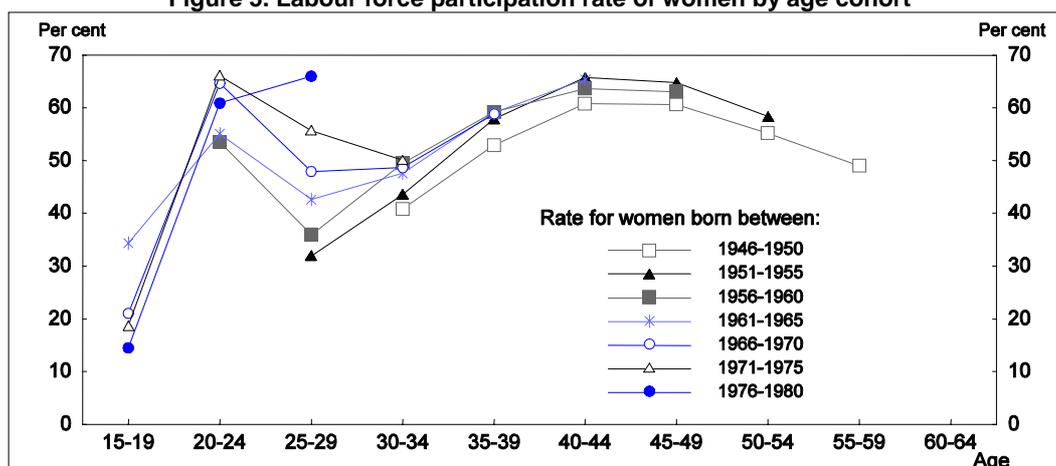


Source: OECD (2008b), *Employment Outlook 2008*, OECD, Paris.

Factors limiting the labour force participation of women in Korea

12. The decision to return to work depends on labour market conditions. In Korea, the average wage of women is 38% below that of men, much larger than the OECD average of 18%. The large gender gap reflects a number of factors. *First*, a large proportion of women are non-regular workers and thus receive significantly lower salaries. While one-third of both men and women are in non-regular employment during their twenties, the rate decreases for men in their thirties and forties, while increasing to over 40% for women (Table 1). Even women employed as regular workers prior to interrupting their careers for child rearing are likely to end up in non-regular employment if they return to the labour force (Hwang and Chang, 2004). *Second*, the tradition of seniority-based wages rewards workers with long tenures (see below). As a result, women who interrupt their careers tend to be locked into low salaries regardless of performance. *Third*, although women make up 38% of the workforce, their share of managerial jobs is only 8%, compared with 20% to 30% in many OECD countries (OECD, 2007a). After adjusting for workers' characteristics, the gender gap in wages is estimated at about 20% for regular workers (Jeong, 2003).

Figure 5. Labour force participation rate of women by age cohort

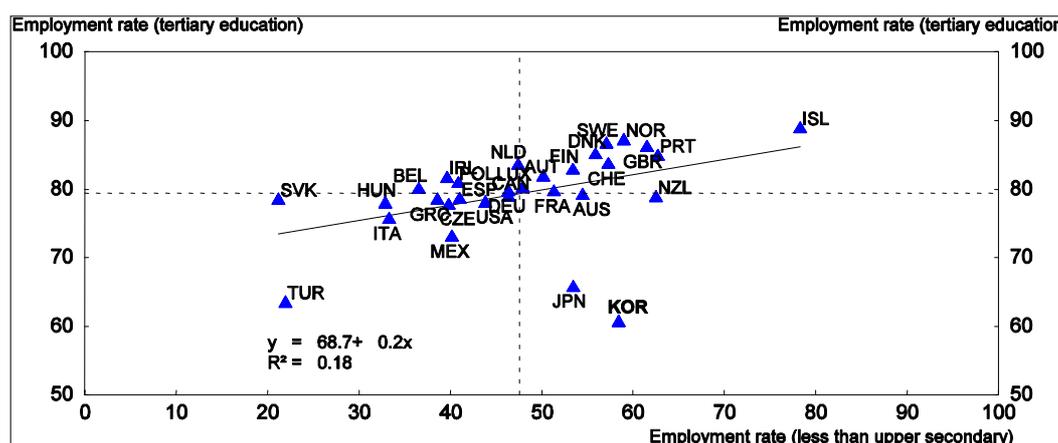


Source: Korea National Statistical Office.

13. In sum, unattractive employment options tend to discourage women from returning to the labour market. Indeed, Korea is one of the few OECD countries where the employment rate of female university

graduates (61%) is not significantly higher than that for women with less than an upper secondary education (58%). This is explained by a high reservation wage among women with high educational attainment, making them reluctant to accept low-paying jobs. In contrast, the average employment rate for female university graduates in the OECD area, at 79%, is significantly higher than the 48% rate for women with less than an upper secondary education (Figure 6).

Figure 6. Employment rate of women by educational attainment in OECD countries¹

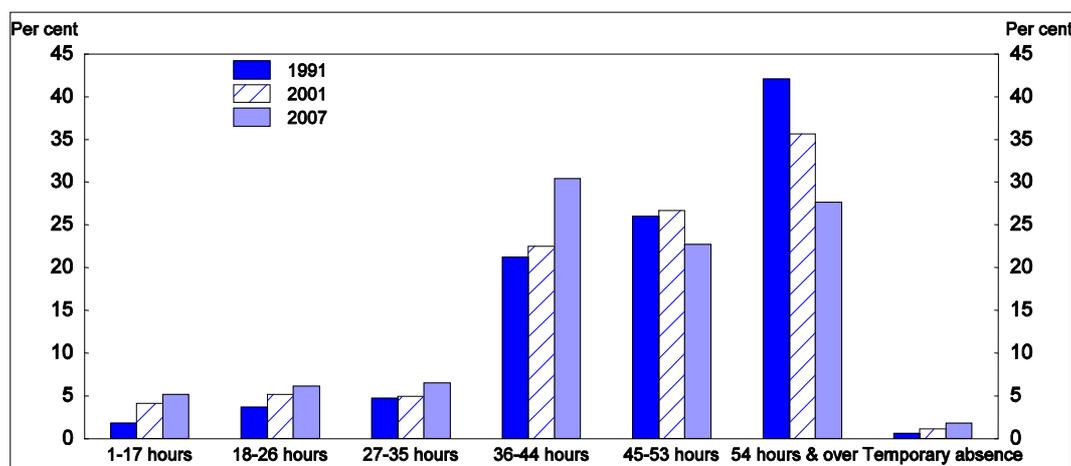


1. The OECD average is shown by the dotted lines (48% and 79%) depending on the level of education. Source: OECD (2008a), *Education at a Glance 2008*, OECD, Paris and calculations by the Secretariat.

14. A second factor discouraging female employment is long working hours, which make it difficult to combine paid employment with family responsibilities. Despite the gradual introduction of the 40-hour work week from 2004, annual working hours were 2 261 in 2007, more than one-third higher than the OECD average,⁶ reflecting in part the pro-work incentives in the tax system (see the 2008 *OECD Economic Surveys: Korea*). In 2007, 27% of Korean women worked more than 54 hours per week, while another 23% worked between 45 and 53 hours (Figure 7). In addition, there is substantial unpaid overtime and commuting times tend to be long. Moreover, the generally longer working hours of men – more than one-third of whom work more than 54 hours a week – tends to place family responsibilities primarily on women. Finally, opportunities for part-time employment – which is widely used in many countries to reconcile work and family responsibilities, especially when children are young – are very limited in Korea for both men and women (Table 4). Only 12% of Korean women in their thirties, when child-caring responsibilities are heaviest, work part-time, half of the OECD average. One disadvantage of part-time work is that it tends to be paid less, while in many countries such work is paid the same hourly wage as full-time work (OECD, 2007b).

6. The prevalence of long working hours is also linked to the long-term commitment of regular workers to their firms. Regular employees are trained in-house and receive retirement allowances and other fringe benefits. Wages are essentially seniority-based and strongly linked to certified skills, age and tenure in the firm. In return, regular workers accept flexible adjustment of working conditions and long working hours, including unpaid overtime and, in some cases, taking less leave than granted.

Figure 7. Distribution of weekly working hours for women in Korea in 2007



Source: Korea National Statistical Office.

15. A third factor limiting female employment rates is a lack of suitable childcare. In a government survey (Ministry of Labour, 2008), more than 60% of women responded that the “burden of childcare” was the primary obstacle to joining the labour force.⁷ In fact, Korea ranked 24th in the OECD in the school enrolment rates of children between the ages of three and five, at 61% in 2004 (Figure 8). While the share increased to 72% by 2006, it was still low by OECD standards. As for childcare, the government builds and runs public facilities, which care for 10.9% of the children enrolled in childcare (Table 5).

Table 4. International comparison of part-time employment

As a per cent of total employment in 2006¹

		15 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55+	Total
Korea	Male	14.5	3.5	3.3	2.9	4.2	4.9	5.8	14.3	6.3
	Female	15.2	6.4	11.2	12.7	10.8	9.8	10.4	19.4	12.3
	Total	14.9	4.9	6.1	6.6	6.8	6.9	7.6	16.4	8.8
OECD average ²										
	Male	22.4	5.6	3.8	3.4	3.6	3.7	4.6	17.4	8.1
	Female	35.0	16.6	21.7	25.7	25.8	23.6	23.7	57.5	26.4
	Total	28.3	10.4	11.3	12.9	13.5	12.8	13.3	34.5	16.1

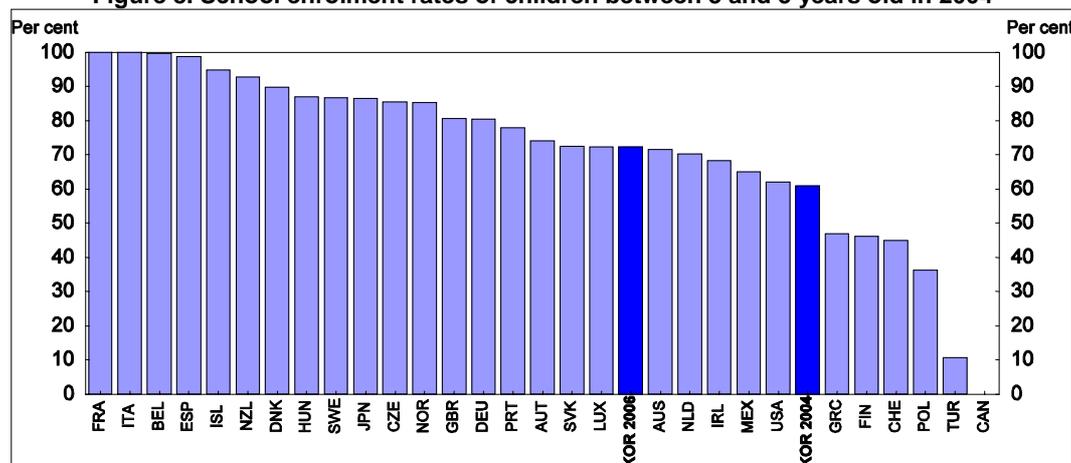
1. Full-time employment based on a common definition of 30 hours of at least work per week in the worker's main job.

2. OECD average excluding Mexico for which data are not available in 2006.

Source: OECD Employment Outlook Database.

7. The other major obstacles were gender discrimination at establishments (14.4%), burden of housekeeping (13.7%), lack of vision (4.7%) and lack of job information (3.1%). However, low female employment cannot be blamed on the tax system, which unlike those in some countries, does not discourage the employment of second earners in households.

Figure 8. School enrolment rates of children between 3 and 5 years old in 2004



Source: OECD Family Database, Ministry of Education and Human Resource Development and Ministry of Gender Equality and Family.

16. A fourth factor limiting female labour force participation is the length and coverage of maternity leave. Paid maternity leave was extended from 60 to 90 days in 2001, with 60 days paid by the employer and the additional 30 days paid by the EIS. Nevertheless, it remains much shorter than the OECD average of 4.5 months (OECD, 2007a). In 2006, the government decided that the EIS would cover 90 days for women employed at SMEs. These measures helped increase the number of women taking maternity leave by more than 50% between 2004 and 2007 to around 58 000. Nevertheless, this is equivalent to only about one-tenth of the number of births that year. The low take-up of maternity leave reflects the low coverage of the EIS (Table 3). In addition, in the 2008 survey, 58% of women replied that maternity leave, as well as parental leave, do not function properly, due in part to pressure from managers or colleagues. A system of parental leave was established in 2001 but the number of participants – 98% of whom are women – is small at only 0.2% of employees.⁸

Table 5. Childcare facilities in Korea in 2007

	Facilities		Children (thousand)		Average size
	Number	Per cent	Number	Per cent	
Government	1 748	5.7	119.2	10.9	68.2
Private, non-profit ¹	1 460	4.7	118.3	10.8	81.0
Private sub-total	14 083	45.6	668.9	60.9	47.5
Corporation	1 002	3.2	55.9	5.1	55.8
Individual	13 081	42.4	612.2	55.7	46.8
Parents' co-operative	61	0.2	1.4	0.1	23.7
Family ²	13 184	42.7	178.0	16.2	13.5
Workplace-based	320	1.0	15.1	1.4	47.3
Total	30 856	100.0	1 098.5	100.0	35.6

1. Social welfare corporations subsidised by the government. These facilities, as well as those of the government, must have at least ten children, while those in the private sector must have at least 20.

2. "Family" refers to childcare provided at residential houses. The number of children can range between four and 21.

Source: Ministry for Health, Welfare and Family Affairs.

8. A subsidy of 0.4 million won per month (a quarter of the average wage) is provided for those with children under one-year-old. The programme also gives a monthly subsidy to the firms of workers taking leave.

Policies to raise the female participation rate

17. The government offers wage subsidies to encourage women to remain in the work force or return to it after having children. Given the high deadweight costs associated with wage subsidies, a better approach would be to attract women back into the labour force by creating better job opportunities, in part by reversing the rising trend of non-regular workers. In addition, expanding the use of performance-based pay in place of the seniority-based system (see below) would provide better opportunities. Another important priority is to expand the availability of childcare. In 2006, the government established a target to triple the share of children in public facilities from 11% to 30% over five years (*OECD Economic Surveys: Korea, 2007*). While such an approach aims at providing a similar quality of care for each child, it would be more efficient to allow a larger role for the private sector, thereby attracting new funding and greater dynamism while limiting public outlays. Increasing the role of private firms would require removing or lifting the price cap on fees, which is set below the minimum level needed to provide quality childcare, according to the government.⁹ However, this might boost the cost of childcare to households, leading mothers to withdraw from the labour force rather than rely on lower-quality, informal care. This concern could be met by providing childcare vouchers directly to households, which may prove to be a less expensive approach than the plan to build public childcare facilities.¹⁰ Concerns about quality should be met by requiring that public support for parents be used for childcare provided by licensed facilities.

18. Further extending the length of maternity leave beyond 90 days would also boost female participation. One study found that around five months is the optimal length (measured in full-time equivalents) from a labour supply perspective (Jaumotte, 2003). At the same time, it is important to increase the scope for women to take maternity leave. One key is to expand the coverage of the EIS, which plays a major role in financing maternity leave. The revision of parental leave in 2007, which raised the eligible age of children to three-years-old, boosted the monthly allowance to 0.5 million won and allowed parents to take the leave on a part-time basis, should help make this programme more attractive to parents.

19. In sum, while the Korean tax and social benefit systems are characterised as pro-growth, women still receive little public support to help them reconcile work and family responsibilities. While policies that are more favourable toward female employment are important, the impact would be limited by workplaces that are not family-friendly, not least due to exceptionally long working hours.¹¹ Family-friendly workplaces are essential for the reconciliation of work and family life and also have important implications for the fertility rate (see below). The labour market will have to adjust in order to provide mothers with the hours, jobs, wages and careers that will attract them back into employment. While many of these adjustments will be based on agreements between firms and employees, the government needs to ensure an appropriate framework based on the above recommendations.

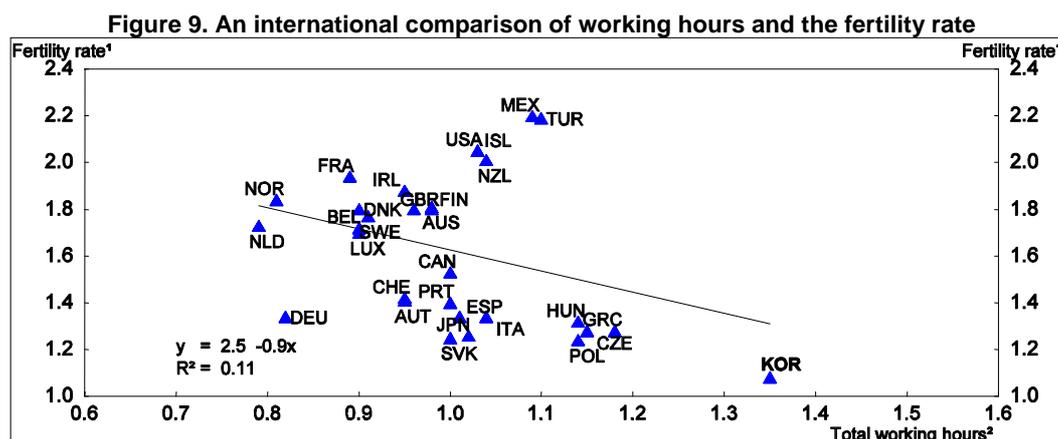
9. For example, for children less than one-year-old, the cap is set at 361 000 won per month, with the government providing an additional subsidy of 292 000 won. The combined amount (663 000 won) is well below the 789 000 won that the government calculates is necessary to provide adequate care.

10. A number of countries, including Australia and the United States, have found success in using a system of childcare vouchers. Other countries, such as Canada, Germany and the United Kingdom, use tax credits and cash benefits to reimburse expenses. Shifting government funding from supplying childcare services to providing vouchers to families would foster competition among providers and give more choice to parents, as has occurred in Australia (Pearson and Martin, 2005).

11. The Work and Family Life Compatibility Support Task Force was established in 2008 to address this issue.

Boosting the fertility rate while expanding female participation in the job market

20. The government's goal is to boost the fertility rate from 1.26 to the OECD average of 1.6. The positive correlation between female labour force participation and fertility rates in the OECD area suggests that it is possible to lift both. However, the positive relationship breaks down when the length of working hours is considered (Figure 9). Reducing working hours to the OECD average may significantly boost fertility. Another factor reducing fertility is the low level of public spending on family benefits, which at only 0.1% of GDP, is the lowest in the OECD area and well below the OECD average of 2.4%.



1. The fertility rates are for 2005, except for Canada (2004).
 2. The OECD average for total working hours (in 2005) is set at 1.0.
- Source: OECD Family Database and calculations by the Secretariat.

21. The government announced a five-year plan in 2006 to boost the fertility rate by alleviating the burden of bearing and caring for children, and creating more family-friendly workplaces to reduce obstacles facing women who wish to combine employment and childrearing.¹² The policies recommended above to lengthen parental leave and increase the availability of childcare to boost female labour force participation should also have a positive effect on fertility, according to OECD research (d'Addio and Mira d'Ercole, 2005). On the other hand, tax and social benefits for families with children, as suggested in the five-year plan, have been found to lower female labour participation in other countries (Jaumotte, 2003). Given the priority to raise female employment, increases in transfers to families with children should be aimed at reducing child poverty, rather than increasing the fertility rate.

Improving the job prospects of young people

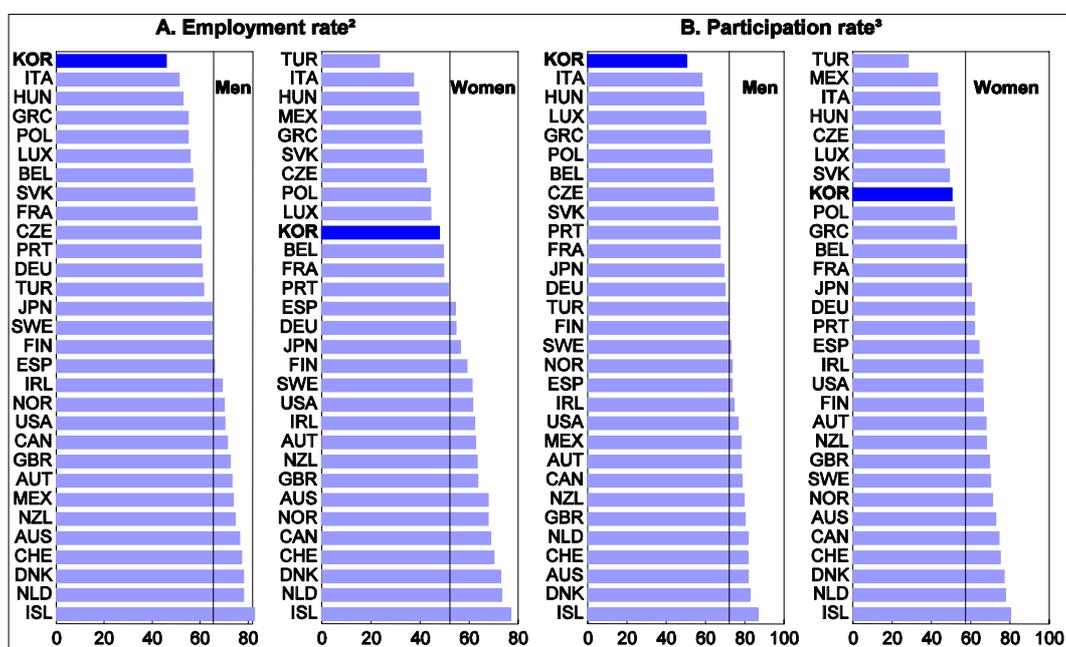
22. The fall in the youth employment rate, from 51% in 1995 to 47% in 2007, has focused attention on their integration in the labour market. Indeed, the rate for young men in 2007 was the lowest in the OECD area (Figure 10). This is explained to some extent by high enrolment in tertiary education, limited possibilities to combine school and work and the 30-month military service obligation for men. The problem is most severe for persons with less educational attainment. Only 53% of those with less than an upper secondary education and 68% of upper secondary graduates could find jobs within a year of leaving school, as against 81% of tertiary graduates. In addition, more than half of new employees between the ages of 15 and 29 quit their first job during the first year and another third quit before the end of three years. One reason for the low employment rate is the mismatch between the skills provided by tertiary education and those needed by firms.

12. See Box 5.1 in the 2007 OECD Economic Surveys: Korea for a detailed account of this issue.

23. The unemployment rate for youth (7.5%) is below the OECD average (9.6%). However, this reflects weak incentives for unemployed youth to remain in the labour market, given that there are few welfare benefits for individuals without a record of social security contributions. Moreover, a large number of youth are neither in employment nor in education or training (the so-called NEETs). In 2004, NEETs accounted for 17% of the 15-to-29 age group, slightly above the OECD average (Figure 11).¹³ The share of NEETs among youth with tertiary education is around three times higher than the OECD average, while the rate among youth with less than upper secondary education is significantly below. This points to a mismatch between the university system and the labour market. Many educated youth are waiting or preparing for job entrance exams in the public or private sector.¹⁴ The high rate of NEETs among tertiary graduates, combined with the relatively low incidence of non-regular employment among this group, suggests that educated youth in Korea tend to stay out of the labour market rather than accept jobs that do not match their expectations. In other words, growing labour market dualism has discouraged employment of educated youth by widening the gap between their reservation wage and the offered wage.

Figure 10. International comparison of employment and participation rates for young people

As a per cent of youth aged 15 to 29 by gender in 2007¹



1. For France and Germany, data are available only for 2006. The vertical lines indicate the OECD average.

2. Employed as a percentage of the population in the age group.

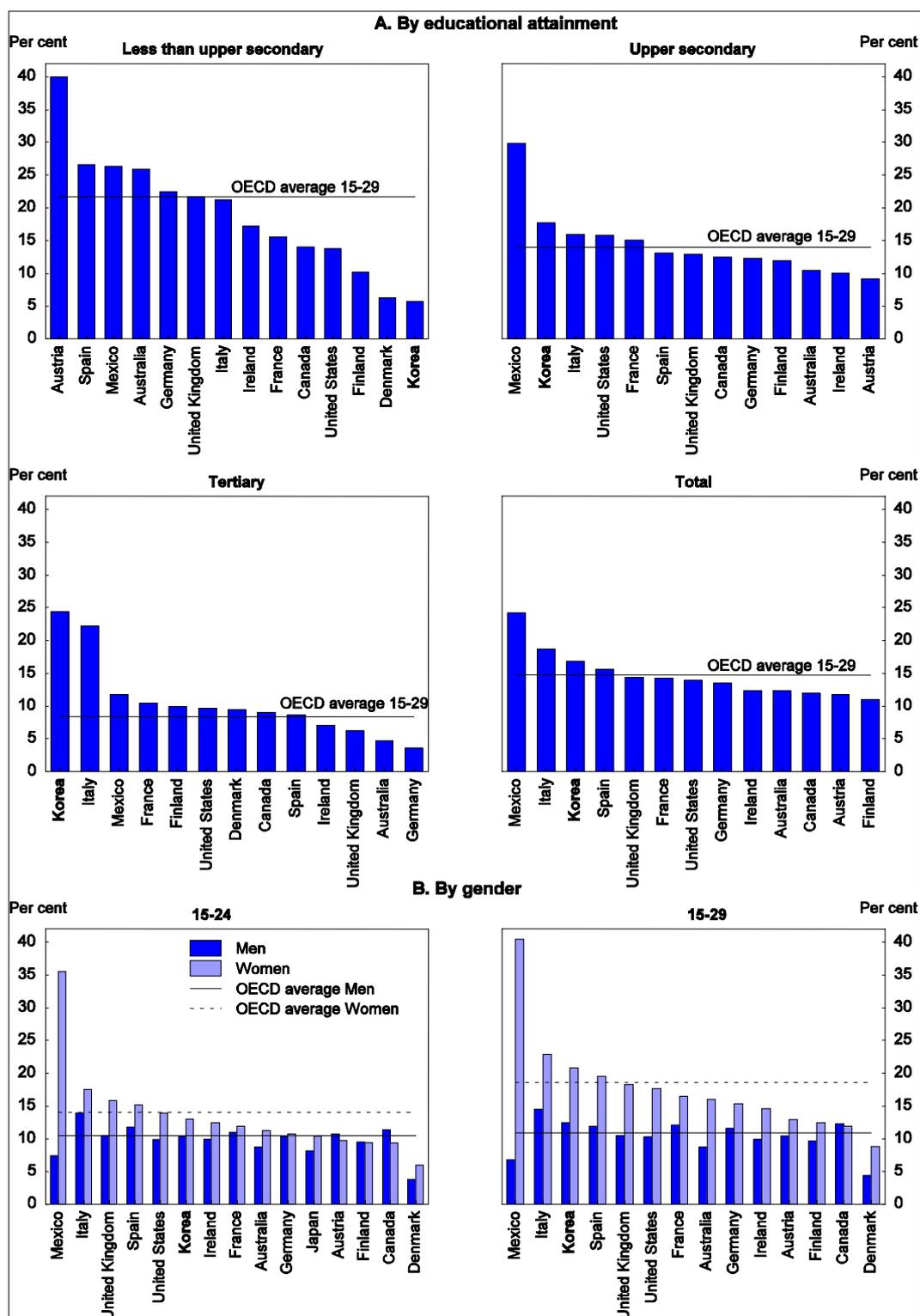
3. Labour force as a percentage of the population in the age group.

Source: OECD Employment Outlook Database.

13. There is some difference between the OECD definition of NEETs used here and that used in Korea. In Korea, NEETs include youth between 15 and 34 who are not employed, not married, not handling family responsibilities and not attending school or an institution for job preparation (Nam, 2006). In 2007, there were 276 000 youth preparing for job entrance exams in the public or private sector. This group is included in the OECD definition of NEETs, but not in the Korean definition (OECD, 2007c).

14. The NEETs include the 276 000 preparing for job entrance exams, 150 000 who were preparing for college/university entrance exams they previously failed and 196 000 who were “just resting”. The remainder cited other reasons such as childcare, housework and disability (OECD, 2007c).

Figure 11. Inactive youth: neither in employment nor in education or training (NEET)
 By educational attainment and gender for the 15-to-29 age group in selected OECD countries in 2004¹



1. Data for Korea and New Zealand are for 2005. For educational attainment in the United Kingdom, they are for 2003. Source: OECD (2007c), *Jobs for Youth: Korea*, OECD, Paris.

24. A key way to raise youth employment is to stem the trend toward non-regular employment, which pays far less than regular jobs. In 2007, only 69.6% of new university graduates found jobs (Table 6), despite labour shortages in some sectors and 5% economic growth. Although 16.1% accepted jobs as non-regulars, many of the 20.5% that were not working presumably had reservation wages above the pay offered in non-regular employment. Moreover, given limited mobility between regular and non-regular employment, a significant number of graduates prefer to wait for a regular job rather than to be classified as non-regulars.¹⁵ The proportion of new graduates finding employment would be increased by addressing the factors responsible for labour market duality. Another way to boost employment would be to reduce the number of youth preparing for entry exams, primarily for public-sector jobs, a category that accounts for 16% of NEETs. The willingness to accept such opportunity costs suggests that the wage and pension benefits of such jobs are higher than other jobs; an OECD study found a wage premium on public workers in many countries (Strauss and Maisonneuve, 2007).

Table 6. Employment outcomes for university graduates in 2007

	Graduates	Employees	Regular	Non-regular				Self-employed	Not working	Others ⁴
				Sub-total	Temporary ¹	Daily ²	Family ³			
Total	560 632	390 180 69.6%	290 907 51.9%	90 470 16.1%	60 749 10.8%	26 633 4.8%	3 088 0.6%	8 803 1.6%	115 073 20.5%	55 379 9.9%
Professional universities	215 040	173 804 80.8%	132 783 61.7%	37 678 17.5%	25 248 11.7%	11 584 5.4%	846 0.4%	3 343 1.6%	27 527 15.8%	13 709 6.4%
Teacher universities	5 929	4 109 69.3%	3 680 62.1%	429 7.2%	417 7.0%	12 0.2%	0 0.0%	0 0.0%	1 537 25.9%	283 4.8%
General universities	277 858	168 254 60.6%	120 618 43.4%	44 333 16.0%	28 644 10.3%	13 608 4.9%	2 081 0.7%	3 303 1.2%	75 842 27.3%	33 762 12.2%
Industrial universities	26 490	19 714 74.4%	15 701 59.3%	3 299 12.5%	2 425 9.2%	737 2.8%	137 0.5%	714 2.7%	5 354 20.2%	1 422 5.4%
Other universities ⁴	282	109 38.7%	48 17.0%	57 20.2%	57 20.2%	0 0.0%	0 0.0%	4 1.4%	16 0.5%	157 55.6%
Graduate school (general)	35 033	24 190 69.0%	18 077 51.6%	4 674 13.3%	3 958 11.3%	692 2.0%	24 0.1%	1 439 4.1%	4 797 13.7%	6 046 17.2%

1. Temporary employees include those whose labour contracts are for less than one year.
 2. Includes part-time employees who work more than 18 hours a week.
 3. Family employees are unpaid workers in establishments owned by family or relatives.
 4. Includes those continuing to advanced studies and men fulfilling their military service obligation.
 5. Other universities include military schools, Taegu divinity school, etc.
- Source: Ministry of Education, Science, and Technology.

15. According to the 2003 and 2004 EAPS Supplementary Surveys, about 15% of non-regular workers became regular workers while over 20% became economically inactive, unemployed, or unpaid family workers. In contrast, KLIPS data indicate that about one-third of non-regular workers became regular workers in 2005-06. The different definitions of non-regular workers used in the two data sets affects the results. KLIPS data also show about 80% of regular workers retaining their status and less than 10% becoming economically inactive, unemployed or unpaid family workers.

Improving active labour market policies for youth

25. Public spending on active labour market policies for youth has increased from 0.02% of GDP in 2002 to 0.09% in 2007. There are 61 public programmes targeting youth through direct job creation, training, employment subsidies and job experience programmes. The large variety of small programmes makes it difficult for youth to find the proper programme, increases administrative costs and complicates monitoring and evaluation (OECD, 2007c). Indeed, classifying programmes by their target group shows a wide variation in the number of jobs created per won of outlays (Table 7). For example, programmes aimed at non-employed university graduates create nearly three times more jobs per won than those aimed at university students. It is important to streamline and consolidate these programmes, thus facilitating more rigorous evaluation to determine which ones should be terminated and which should be expanded. For example, wage subsidies in OECD countries have high deadweight costs, while training programmes in Korea tend to be supply-driven rather than responding to labour market needs (OECD, 2007c).

Table 7. The number of jobs created by employment programmes and their efficiency

Policy targets	The number of jobs		Jobs per 100 million won	
	2005	2006	2005	2006
Non-employed upper secondary graduates	8 590	13 331	10.3	9.9
Non-employed university graduates	3 719	3 058	15.5	16.5
Upper secondary students	4 023	1 088	15.2	3.2
University students	268	694	4.1	6.5
Unemployed youth	30 793	53 786	19.1	24.1
Total	47 393	71 957	15.7	17.0

Source: Kyu-Yong Lee (2008).

26. The Youth Job Experience Programme (YJEP), aimed at students and unemployed youth between the ages of 15 and 29, was launched in 1999 to facilitate the school-to-work transition. The 60 000 participants each year are given a training allowance of 0.3 million won per month for two to six months. The programme is available to firms with five or more employees, NGOs, government agencies and public enterprises. Firms are also given subsidies to encourage their participation. This programme is shortening the school to work transition¹⁶ and reducing the share of youth that become economically inactive. The government plans to make the YJEP the main tool for facilitating the school-to-work transition.¹⁷ However, given that the participants are primarily university students, it is necessary to expand the programme to include more lower-educated youth on equity grounds (OECD, 2007c).

16. Those participating in the YJEP take an average of 9.6 months to move from school to a first job compared with 14.4 months for those without job experience during their studies. Moreover, YJEP participants stayed longer in their first jobs (53% after 24 months) compared with those who did not participate (31%).

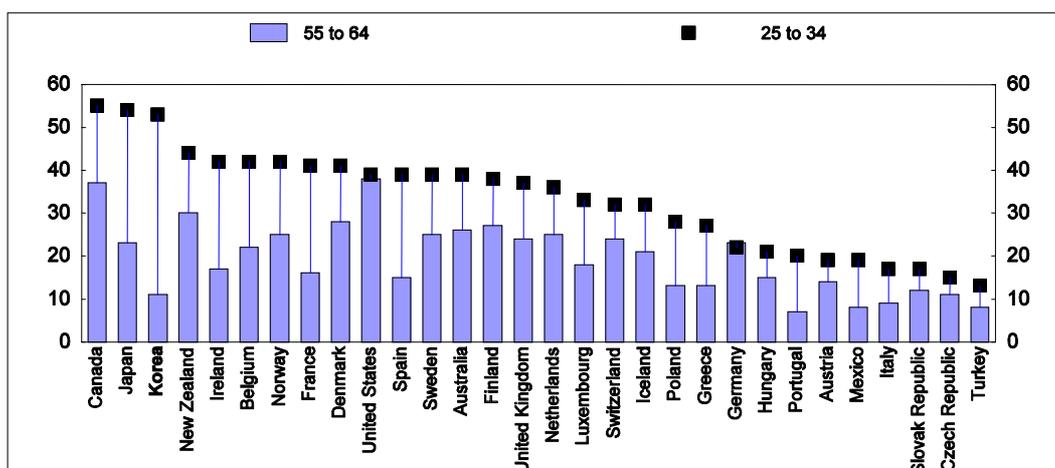
17. The YJEP, which was introduced in 1999, is to be improved by strengthening its link to career guidance and training programmes. All participants are to take part in a one-week career guidance programme and are offered employment support by Job Centres after completing the YJEP programme. In order to encourage more opportunities for training at private firms, the proportion of participants in the public sector is to be limited to 30%. In addition, preferential support is provided to companies if they offer places in occupations other than clerical jobs, such as technical and skilled positions (OECD, 2007c).

Upgrading the education system

Improving the quality of tertiary education through competition and stronger links with firms

27. Korea has a remarkable record of expanding enrolments at all levels of schooling. The share of the 25-to-34 age group with tertiary education reached 53% by 2006, compared with only 11% for the 55-to-64 age group (Figure 12) and will continue rising, given that over 80% of upper secondary students advance to tertiary education, compared to only 33% in 1990.¹⁸ The strong demand for education boosted the number of universities from 148 in 1990 to 211 in 2007, including 161 private ones. A university education is considered almost mandatory by parents. However, the performance of tertiary education is not as good as expected by stakeholders. In an international survey of executives on the effectiveness of a country's education system in meeting the needs of a competitive economy, Korea ranked 53rd out of 55 countries (IMD, 2008), indicating that the university system does not respond effectively to the demands of the business sector. In addition, the large net outflow of students raises questions about quality. The number of students overseas rose by 45% between 2001 and 2007 (Table 8), by which time they accounted for 7% of all tertiary students in Korea. In 2006, Korea accounted for 4% of foreign student flows to the OECD area, making it the third-largest source after China and India, while its role as a destination is one of the lowest in the OECD area. Low quality is related to the level of spending: in 2005, spending per student at the tertiary level was \$7 606 in Korea (at purchasing power parity exchange rates) compared to an OECD average of \$11 512.

Figure 12. International comparison of tertiary education in different age groups in 2006



Source: OECD (2008a), *Education at a Glance 2008*, OECD, Paris.

28. Another problem is the mismatch between the skills provided by tertiary education and labour market requirements, which has accompanied the rapid expansion of tertiary education. For example, about 35% of tertiary graduates in natural and social sciences do not find jobs in their field of study (Table 9). To reduce mismatch, universities need to provide career-related information and guidance to students. While universities have already launched initiatives to improve their connections with the labour market, greater competition between universities would reward those that are most successful in this regard. This requires an effective institutional arrangement for monitoring the labour market outcomes of each university's students and providing such information to the public (OECD, 2006b). From 2009, universities will be

18. This includes those finishing vocational upper secondary schools. Two-thirds of this group pursue tertiary education.

required to conduct self-evaluation of their results. At the same time, they will be evaluated by government-recognised organisations, which will also be responsible for accreditation. Increased transparency about the performance of universities should be accompanied by stronger accreditation requirements. In addition, it is important to implement a May 2008 law requiring public disclosure of key information about universities in 13 areas, such as enrolment rates, employment rates of graduates, faculty ratios, research outcomes, budgets and facilities, to help guide students in their choice of university.

Table 8. The number of students studying abroad

A. Number of Korean primary and secondary school students who left Korea between 1996 and 2006

Year	Primary school	Lower secondary	Upper secondary	Total
1996	341	1 743	1 489	3 573
2000	705	1 799	1 893	4 397
2004	6 276	5 568	4 602	16 446
2006	13 814	9 246	6 451	29 511

B. Number of Korean students who studied abroad in university or higher programmes during 2001-07

Year	Degree programmes			Language study	Total
	Graduate school	University	Sub-total		
2001	37 328	71 823	109 151	40 782	149 933
2004	38 494	67 399	105 893	81 790	187 683
2007	41 993	81 972	123 965	93 994	217 959

Source: Ministry of Education, Science, and Technology.

29. Public universities tend to be heavily regulated, with a large number of ministries applying regulations in a wide range of areas including financing, budget and staffing (OECD, 2007e). Public and private universities are prohibited from using written exams of Korean, English and mathematics, as part of the admission procedure until 2010, at which point universities will be free to introduce such exams. Moreover, there are enrolment quotas for all universities in the capital region and public universities in other areas.¹⁹ In addition, universities were used as “an engine to achieve balanced national development”, which may distract them from their fundamental goal. While the government has launched a programme of regulatory reform, further liberalisation of university management would encourage them to better respond to the preferences of students and changes in the labour market. Moreover, it would promote diversity between universities and strengthen competition. Opening the university system to accredited foreign

19. In addition, teachers’ universities and medicine and nursing schools face quotas to match supply with labour demand.

Table 9. Employment rates after graduation and study-job matches of tertiary graduates¹

Fields of study	Employment rate (%)	Study-job match rate (%)
All higher educational institutions	76.1	72.3
Education	73.1	86.2
Medical and pharmacy	89.2	92.9
Engineering	78.2	76.8
Social sciences	73.1	62.8
Art and physical education	79.9	77.7
Natural sciences	72.5	67.0
Humanities	68.5	50.2

1. The data are based on a survey by colleges and universities of 560 000 graduates. The employment rate after graduation refers to the ratio of those who found jobs as of 1 April 2007 among those who graduated in February 2007 (including some who graduated in August 2006). The study-job match rate is based on the self-assessment of those graduates.

Source: Ministry of Education, Science, and Technology.

providers would also stimulate competition and upgrade the competitiveness of universities. At present, there is only one foreign graduate school operating in Korea. In sum, greater competition would lead to a more efficient university sector, helping to reduce mismatch problems. In addition, competition is essential to guide the restructuring of the university sector as the university-age cohort begins to shrink.

30. A second issue related to tertiary education is its high cost for students, reflecting a low level of public funding. Indeed, public outlays on tertiary education amounted to around \$1 848 per student (at PPP exchange rates) in 2005 compared to an OECD average of around \$8 400. As a share of GDP, it is only 0.6%, half of the OECD average. In contrast, spending on primary and secondary schools, at 3½ per cent, matches the OECD average (Figure 13). Consequently, most of the cost of tertiary education is borne by households, which is generally appropriate given that private returns are higher than social returns. The reliance on private financial resources also helps convey information on costs and benefits of education, thus making possible informed investment decisions (Boarini and Strauss, 2007). In the case of Korea, though, the exceptionally rapid expansion of tertiary education and the low level of public expenditure compared to the OECD average appear to justify increased public spending to reduce the burden on families while improving the quality of the university system. Moreover, limiting the increase in tuition fees by expanding public spending would tend to boost the rate of return on human capital investment and ease financing constraints for individual students (Oliveira Martins *et al.*, 2007). Demographic factors will facilitate a shift in the allocation of funds between levels of education in favour of tertiary education: by 2020, the number of primary and secondary students is projected to fall by one-third while the number of university-age persons declines by only 10.7% (Table 10).

Table 10. Projection of the number of students by age cohort¹

Number of students in thousands and an index with 2006 = 100

Age cohort	6-11 years	12-14 years	15-17 years	18-21 years	Total	Share (%) of total population
Corresponding school	Primary school	Lower secondary	Upper secondary	College and university		
2006	3 922 100.0	2 093 100.0	1 907 100.0	2 541 100.0	10 464 100.0	21.7
2010	3 296 84.0	1 961 93.7	2 069 108.5	2 573 101.3	9 901 94.6	20.3
2020	2 510 64.0	1 291 61.7	1 364 71.5	2 268 89.3	7 434 71.0	15.1
2030	2 209 56.3	1 130 54.0	1 174 61.6	1 647 64.8	6 162 58.9	12.7
2040	2 001 51.0	1 074 51.3	1 071 56.2	1 432 56.4	5 580 53.3	12.0
2050	1 525 38.9	838 40.0	908 47.6	1 329 52.3	4 601 44.0	10.9

1. The top line for each year shows the number of students in thousands and the second the number as a share of the 2006 level.
Source: Ministry of Education, Science, and Technology.

31. The financial burden of tertiary education could be reduced by shortening the length of study by streamlining programmes, reducing slack in student timetables, strengthening incentives for studying faster and imposing penalties (higher tuition) for studying longer. Such an approach would also enhance incentives to invest in human capital (Strauss and Maisonneuve, 2007).

Enhancing the quality and efficiency of primary and secondary education

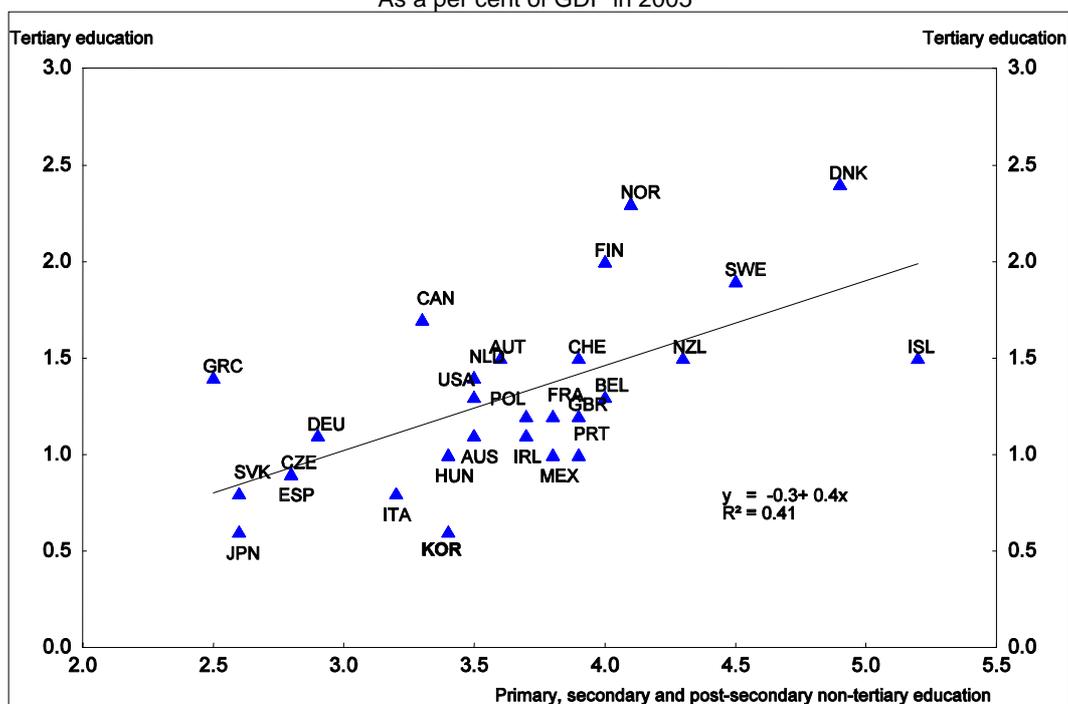
32. Compared to tertiary education, primary and secondary education is widely praised for its high quality, as demonstrated by international tests: Korean students consistently rank among the top performers in the OECD's PISA tests. With combined public and private spending on educational institutions below the OECD average in absolute amount,²⁰ both input and output efficiency in Korea are among the highest in the OECD area (Sutherland *et al.*, 2007). However, there are a number of problems in primary and secondary education, as suggested by the rapid expansion in the number of students studying abroad from around 4 000 in 2000 to almost 30 000 in 2006 (Table 8).

33. Reducing the important role of private, after-school tutoring institutes known as *hakwon* is a major government goal and requires better public education. A government survey found that 77% of students in primary and secondary education go to private tutoring for an average of about 10 hours a week (Table 11). Each household on average pays about 8% of monthly income for tutoring, with the total cost amounting to 2.2% of GDP in 2007. Adding this amount to public and private expenditures on educational institutions would boost educational outlays to 9½ per cent of GDP, the highest in the OECD area. The large role of private tutoring creates a number of concerns. *First*, it creates very long days for children, thus hindering their full development. *Second*, it competes and overlaps with public education, thus raising total expenditures on education unnecessarily. *Third*, the high cost of private tutoring hinders equal access to educational opportunities, raising equity issues. *Fourth*, it creates problems for the public education system, which has to cope with students of widely differing educational levels. Several studies indicate that

20. In 2005, total cumulative expenditure per student during primary and secondary education was \$68 424 (at purchasing power parity exchange rates), 22% below the OECD average (OECD, 2008a).

the high reliance on private tutoring is related to the low quality of schools (Taejong Kim, 2005) and dissatisfaction with public education (Hyunjin Kim, 2004).

Figure 13. Total public expenditure on education
As a per cent of GDP in 2005¹



1. Public expenditure here includes public subsidies to households for living costs, which are not spent on educational institutions. Source: OECD (2008a), *Education at a Glance 2008*, OECD, Paris.

34. Reducing the important role of private, after-school tutoring institutes known as *hakwon* is a major government goal and requires better public education. A government survey found that 77% of students in primary and secondary education go to private tutoring for an average of about 10 hours a week (Table 11). Each household on average pays about 8% of monthly income for tutoring, with the total cost amounting to 2.2% of GDP in 2007. Adding this amount to public and private expenditures on educational institutions would boost educational outlays to 9½ per cent of GDP, the highest in the OECD area. The large role of private tutoring creates a number of concerns. *First*, it creates very long days for children, thus hindering their full development. *Second*, it competes and overlaps with public education, thus raising total expenditures on education unnecessarily. *Third*, the high cost of private tutoring hinders equal access to educational opportunities, raising equity issues. *Fourth*, it creates problems for the public education system, which has to cope with students of widely differing educational levels. Several studies indicate that the high reliance on private tutoring is related to the low quality of schools (Taejong Kim, 2005) and dissatisfaction with public education (Hyunjin Kim, 2004).

Table 11. Private tutoring in Korea in 2007

	Participation rate (%)	Average hours of participation per week ¹	Per capita expenditure (thousand won) ¹	Share ²	Total expenditure (trillion won)	Share of GDP (%)
Total	77.0	10.2	288	8.0	20.0	2.2
Primary school	88.8	10.0	256	7.1	10.2	1.1
Middle school	74.6	11.9	314	8.7	5.6	0.6
General high school	62.0	8.3	388	10.7	3.9	0.4
Vocational high school	33.7	7.4	198	5.5	0.4	0.0

1. Of those attending private tutoring.

2. As a per cent of household income (salary and wage earners) in 2007.

Source: Ministry of Education, Science, and Technology and Korea National Statistical Office.

35. As in other countries, there is also concern about the system used to allocate students between upper secondary schools. Allowing a wider range of school choice for students at the secondary level would likely be beneficial. Under the residence-based student selection policy – the so-called “equalisation policy” – introduced in 1974, students in urban areas are assigned randomly to schools, both public and private.²¹ However, many urban areas are no longer using random assignment, but are instead allowing students the right to choose the schools that they prefer. In addition, Seoul will introduce a new student allocation system based on students’ school choices beginning in 2010, another step promoting a wider range of school choice. School selection based on academic record, or to a lesser extent, recommendations from feeder schools, would boost efficiency (Sutherland and Price, 2007), while avoiding standardised entrance exams would limit the need for tutoring. In such a framework, schools would have to compete with each other to improve the quality of education. Such competition requires disclosure concerning the performance of schools and teachers to allow benchmarking. Although Korea has national examinations, follow-up statistics on students’ careers and regular inspections of schools, such information has so far not been available to families. However, from December 2008, some key data, including students’ academic achievements, were to become public information.

36. Competition would also be promoted by permitting more “independent private schools”, which were allowed in a pilot project that began in 2002. The government will allow the number to increase from only six in 2008. Another interesting innovation is the creation of four “open-type independent schools” in 2007, in which school management is contracted to a third party in the private sector. Strict regulation, *e.g.* in the areas of curricula and teacher policies, hurts educational performance (Kim *et al.*, 2008). An OECD study found that greater decision-making autonomy at the school level tends to be associated with higher efficiency (Sutherland and Price, 2007). Structural reforms that bring decision-making power and accountability closer to those who teach and manage schools would enhance efficiency without harming quality. In this regard, the recent policy to allow more independent private schools will be beneficial. In addition, 226 high schools have become “autonomous schools” with more independence in management. However, the use of local education governments, which are distinct from local general governments and rely on the central government for more than two-thirds of their revenue, encourages a centralised approach to education (*OECD Economic Surveys: Korea, 2005*). In sum, regulatory reform to expand the autonomous decision-making powers of school would help them meet the needs of students and families.

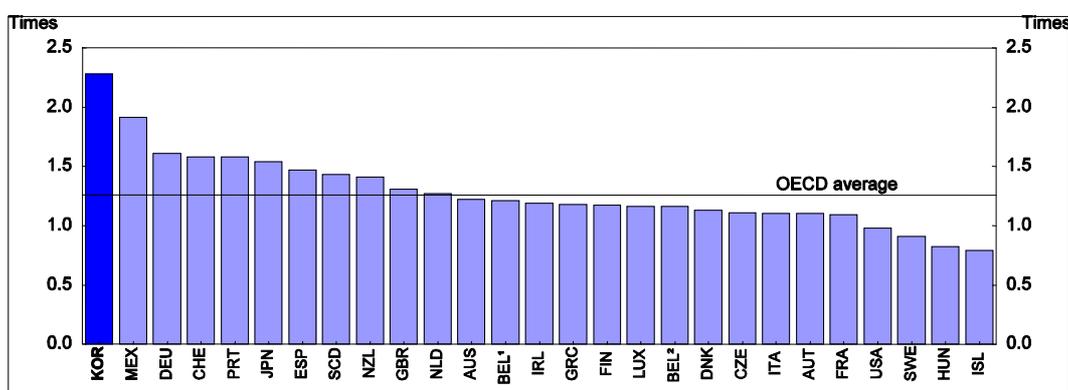
21. As of 2007, there were 2 218 upper secondary schools, of which 995 are private. Despite their name, such schools receive public funds and follow the same curricula as public schools. There are also 129 “special purpose school” offering diversified curricula, such as foreign languages, with special admission criteria.

37. Increased competition among schools could lead to even higher costs for education. However, there is scope to curb costs and improve efficiency, particularly as regards teachers' salaries. The salary of a school teacher with 15 years of experience averages 2.3 times GDP per capita, as against 1.3 times in the OECD area (Figure 14). It is hard to justify such a gap, particularly given that a large part of teaching takes place in private tutoring institutes. Reducing costs would allow schools to employ more teachers and further reduce the student/teacher ratio, which is the highest in the OECD area for both primary and lower secondary schools (Figure 15). In addition, levels of efficiency are higher on average in private schools in the OECD area (Sutherland and Price, 2007), which argues for further increasing the number of independent schools.

38. The quality of secondary education is also affected by the university entrance system. In particular, the ban on written exams as part of the admission process was aimed at standardising secondary education. The heavy reliance on standardised entrance exams encourages private tutoring to gain admission to the best institutions. Allowing universities more autonomy in selecting applicants would reduce reliance on private tutoring. The revision of the college admission system in 2008 to give more weight to performance in school and less to the standardised test was a step in the right direction. The government is taking additional measures to enhance the autonomy of the admission process: *i*) a self-regulatory body, the Korean Council for University Education, will take responsibility for supervising the system from 2008; *ii*) the government will reduce the number of required subjects in the university admission exam in 2012; and *iii*) universities will be granted complete autonomy in admission procedures from 2013.

Figure 14. International comparison of teachers' salaries

Ratio to per capita GDP for a teacher with 15 years experience at lower secondary level in 2006

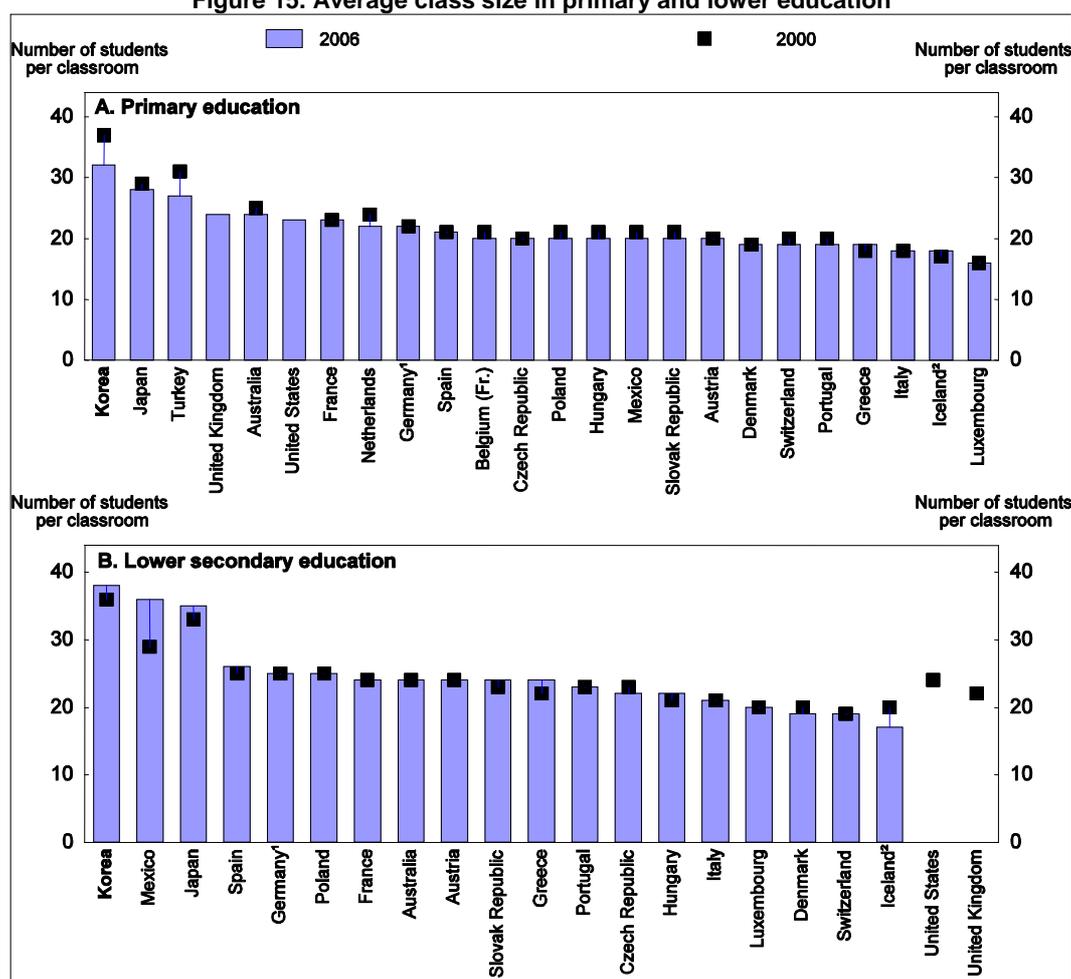


1. Belgium, Flemish-speaking.

2. Belgium, French-speaking.

Source: OECD (2008a), *Education at a Glance 2008*, OECD, Paris.

Figure 15. Average class size in primary and lower education



1. Public institutions only.

2. Years of reference are 2001 and 2005.

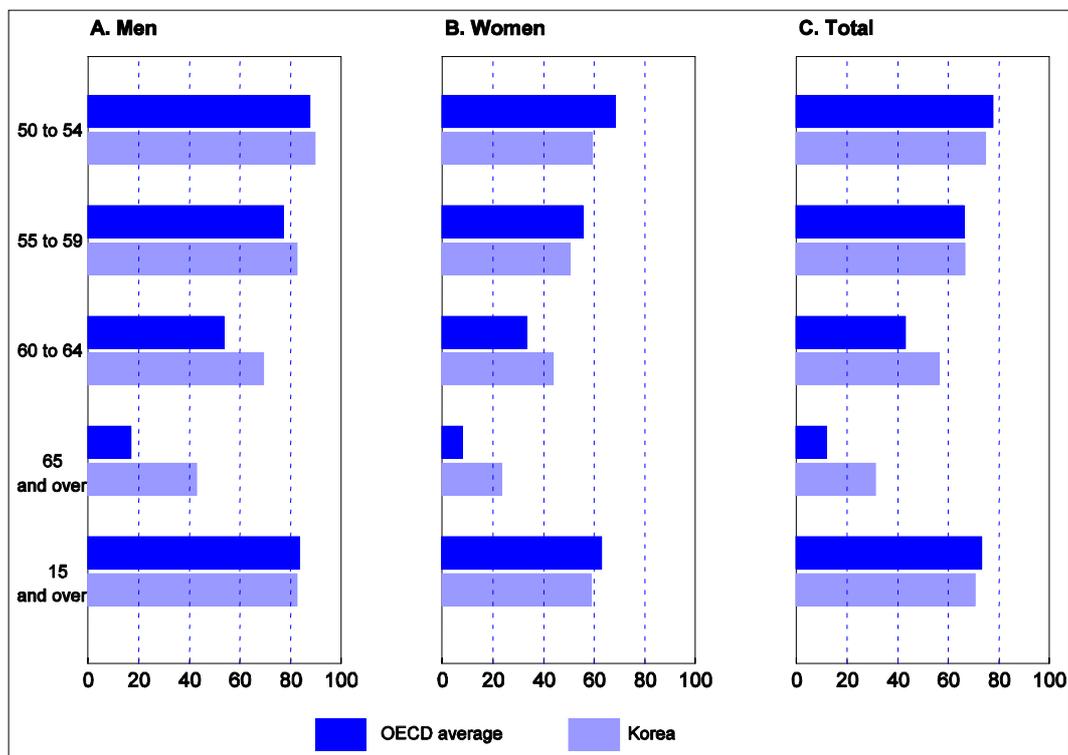
Source: OECD (2008a), *Education at a Glance 2008*, OECD, Paris.

Promoting the employment of older workers

39. Labour force participation in Korea remains high relative to the OECD average for men over 50 and for women over 60 (Figure 16). For the over-65 age group, the participation rate is 31% compared with an OECD average of 12%. Moreover the average effective age of retirement for men in Korea is 71, the second oldest among OECD countries (Figure 17). The early stage of development of the pension system is one factor. For households headed by a person aged 50 or over, public transfers accounted for only 5% of aggregate income in 2006, while the share of wage income was 44%. Transfers from family members or other households accounted for another 46% (Chang, 2008).

40. While older workers are likely to remain in the labour force, they tend to retire early from their main career, at around 55. Indeed, the average employment tenure peaks at 11 years in the 45-to-49 age group – well below most other OECD countries where the peak is in the 55-to-64 age group – and then falls sharply (OECD, 2005). About three-quarters of departing employees become self-employed, primarily in services with low productivity. Consequently, 34% of workers over 50 are self-employed, as against 13% of those under that age. As for workers who remain employed past 50, more than two-thirds worked in firms with less than 100 workers and less than two-fifths were regular workers in 2007.

Figure 16. Labour force participation rates for the over-50 age group in 2007

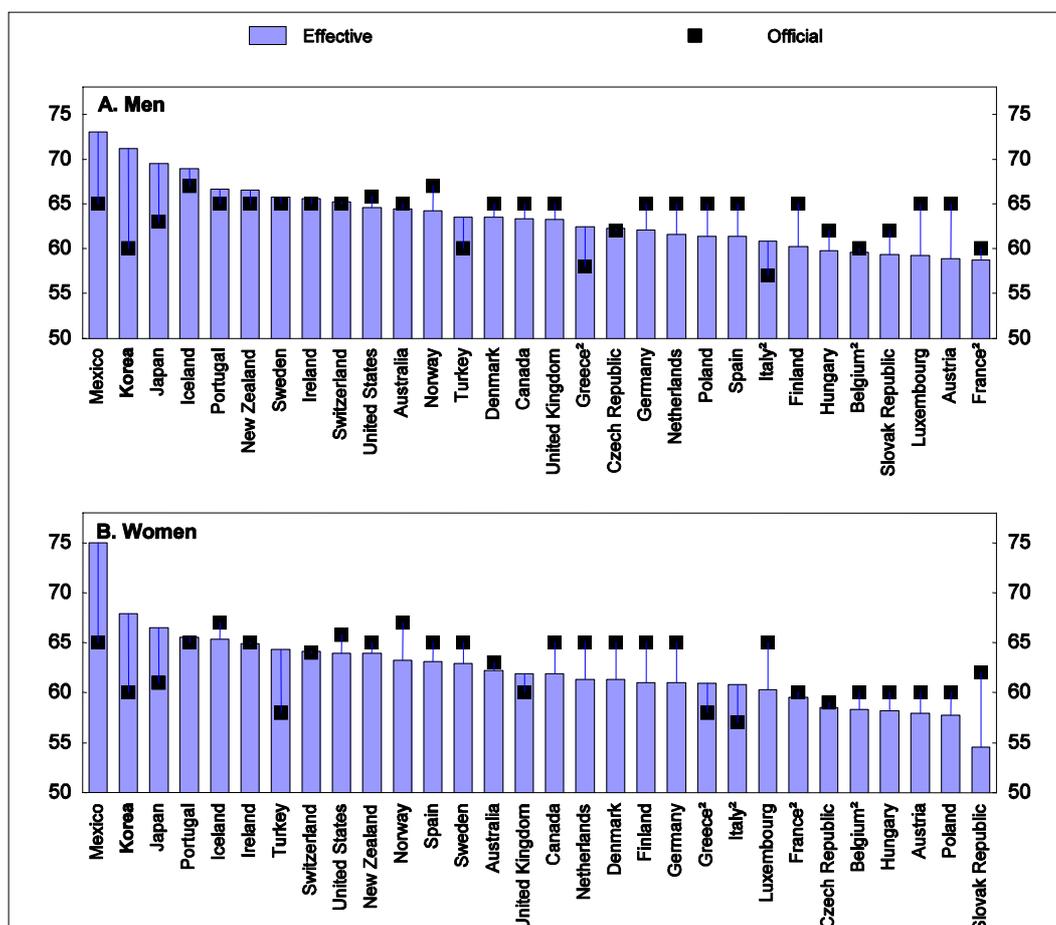


Source: OECD Employment Outlook Database.

Factors explaining early retirement from firms

41. The early departure of employees reflects the importance of seniority in determining wage levels. Indeed, a worker with 25 years of tenure in a firm earns almost three and a half times more than a newly-hired employee (Figure 18) and has less education on average. In 2005, 85% of firms with more than 300 workers set mandatory retirement below the age of 60 recommended by law. Indeed, the average age of mandatory retirement even fell slightly from 57.2 years in 2000 to 56.9 in 2006. Mandatory retirement enables firms to dismiss workers as seniority-based wages surpass their productivity. Companies in which wages are closely linked to seniority hire fewer older workers (Lee, 2008). Given the difficulty of dismissing regular employees, a mandatory retirement system also helps firms adjust their workforces (Cho and Lee, 2005).

42. The government has encouraged the use of a performance-based wage system in order to flatten the tenure-wage profile. The proportion of firms including performance as an element in determining wages rose sharply from 1.6% in 1996 to 48.4% in 2005 (Table 12), despite opposition from workers. However, the share of regular workers in performance-based wage systems was much lower, at 27.6% in 2005, and would likely be even lower if non-regular workers were included. Moreover, the slope of the tenure-wage profile has not changed much in recent years (Figure 18), while the age-wage profile did flatten between 2003 and 2007 (Panel B). This suggests that firms reduced wages for new hires in the 30-to-50 age group, while maintaining the wage profile for existing workers.

Figure 17. International comparison of retirement ages in 2007¹

- The average effective age of retirement is defined as the average age of exit from the labour force. The official age corresponds to the age at which a pension can be received, irrespective of whether the worker has a long record of contributions.
- Women can retire at age 60 with 40 years of contributions in Belgium and France and at 55 with 35 years of contributions in Greece and Italy (for manual workers, otherwise at 57).

Source: OECD, *Live Longer, Work Longer: A Synthesis Report Database* (www.oecd.org/dataoecd/3/é/39371902.x).

43. A second factor promoting the early departure of older workers from firms is the retirement allowance. Companies are required by law to pay a lump sum of at least one month of wages to each departing employee for each year worked, although many pay about twice that amount in practice. The lump sum is based on the employee's final wage, which increases sharply with seniority, creating a disincentive to keep older employees. The retirement allowance is not a secure source of income, as it is

Table 12. Use of performance-based wage systems

	1996	1997	1999	2000	2001	2002	2003	2004	2005
Per cent of workplaces ¹	1.6	3.6	15.1	23.0	27.1	32.3	37.5	41.9	48.4
Per cent of workers ²	1.3	2.0	7.7	12.0	15.2	19.5	22.6	24.0	27.6

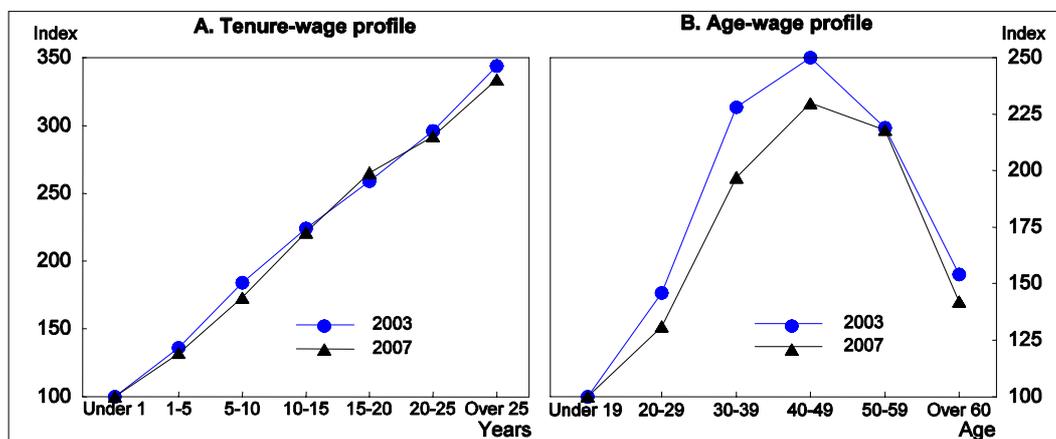
1. Establishments with at least 100 full-time workers.

2. Full-time regular workers in establishments with at least 100 full-time workers.

Source: Ministry of Labour, *Survey on the Annual Salary Scheme and Wage Structure Survey*.

only partially funded, making payments dependent on the firm's survival. Finally, despite its name, this payment has lost its link to retirement income as most workers receive such lump sums a number of times during their working life, given the short average tenure of employees, and often spend it for housing.

Figure 18. Wage profile in Korea¹



1. Wages for 19-year-olds and younger and for less than a year are set at 100 in each year.

Source: Ministry of Labour, *Wage Structure Survey*.

44. Older workers are also challenged by the skills required in Korea's increasingly knowledge-based economy. The proportion of the 55-to-64 age cohort with tertiary education was only 11% in 2006, compared to 53% for the 25-to-34 age cohort, the third highest in the OECD area (Figure 12). The education gap between age cohorts is the largest in the OECD area, leaving older workers at a competitive disadvantage. Indeed, 65% of workers over 50 are in physically-demanding jobs, such as manual work, which tend to be low-paid. Two-thirds of the unemployed over 50 failed to complete secondary school and three-quarters worked previously as daily or temporary workers (Chang, 2004).

Policies to promote the employment of older persons

45. The government's "Basic Plan to Promote Employment of the Aged" aims at increasing the employment rate of the 55-to-64 age group from 59% in 2005 to at least 63%, the level of Japan in 2004 (KDI, 2006). The plan, which will continue through 2021, contains three pillars. *First*, the government will encourage firms to raise their mandatory retirement age, with a goal of eventually eliminating it altogether.²² *Second*, it is providing programmes to support the re-employment of older persons who have left their jobs involuntarily because of retirement ages or dismissal. *Third*, the government is introducing new wage subsidies. For example, the government subsidises firms for up to five years if they guarantee employment until their retirement age, extend their retirement age or offer re-employment programmes to retirees. In addition, there is a new subsidy for workers whose salary is cut as a result of the introduction of new employment status and type of work in their firm.

0.1 The government already offers three different subsidies to encourage firms to hire and retain older workers. The take-up of these grants has nearly tripled since 1996 to ¼ million workers, equivalent to about 7% of the employed over 55. However, the average subsidy per worker is less than 1% of the average wage, suggesting that it does not have a big impact on employment. Real estate service firms account for about two-thirds of the recipient companies, with most concentrated in building maintenance

22. In 2008, the government enacted a law which will prevent unjustified discrimination against older persons in recruitment or employment from 2009 and age discrimination with regard to working conditions such as wages and welfare from 2010 (KOILAF, 2008a).

services. The concentration of the subsidies in one business line raises doubts as to their effectiveness in boosting the overall employment of older workers. Indeed, 92% of firms receiving the subsidy responded that they would have hired the same number of workers in the absence of any assistance (Chang, 2004). The government has also provided a subsidy to older workers to promote the introduction of the “peak-wage system”, which allows wages to fall after some point in exchange for guaranteed employment to an agreed-upon age. However, the take-up of this subsidy has been very low.²³

46. Instead of wage subsidies to reduce the cost of older workers relative to younger ones, it is important to achieve wage flexibility so that older workers remain affordable. Greater opportunities for “continuous employment” at the same firm, rather than self-employment or non-regular work, would encourage older workers to remain in the labour force. Requiring companies to set mandatory retirement at an age closer to the pension eligibility age – or forbidding the use of mandatory retirement altogether – would help change the seniority-based wage system. Firms agree to steep seniority-based wage profiles on the condition that they can force older workers to leave. Without mandatory retirement, firms would insist on wage systems that more closely reflect productivity.

47. In addition, it is important to abolish the retirement allowance system in order to reduce firms’ incentives to retire older workers, as well as to enhance labour mobility. The government launched a company pension system in 2005 to replace the retirement allowance at workplaces with at least five employees, which would provide better income security for retired workers. This requires labour and management to agree on a defined-benefit (DB) or a defined-contribution (DC) scheme. By September 2008, pension plans had been introduced at 8.7% of firms, with large firms taking the lead (21.5%). Overall, company pension plans cover 3.5% of total employees and 9.0% of regular ones. The low coverage reflects different preferences between employers and employees as to which type of plan to introduce. Employers tend to favour DC plans, which account for 79.7% of the company pension plans to date, as they place the downside risk of investment on workers. On the other hand, workers tend to favour DB plans, which are similar to the current retirement allowance in guaranteeing the benefit paid. The difficult environment for collective bargaining frustrates agreements on the type of pension plan.

Table 13. Introduction of company pension plans¹

By size of establishment							
	5 to 9 workers	10 to 29 workers	30 to 99 workers	100 to 299 workers	300 to 499 workers	500 or more workers	Total
Establishments with plans	25 459	11 713	5 313	1 128	175	207	43 995
Total number of establishments	292 140	156 304	45 083	8 700	1 018	965	504 210
Per cent with plans	8.7	7.5	11.8	13.0	17.2	21.5	8.7
By type of company pension plan							
	DB	DC	DB and DC ²	IRA ³	DC ratio (%) ⁴	DC+IRA ratio (%) ⁴	Total
Total	8 911	17 512	386	17 186	40.7	79.7	43 995
500 or more workers	97	53	57		53.1	53.1	207
Less than 500 workers	8 814	17 459	329	17 186	40.6	79.9	43 788

1. Data are for September 2008.

2. A combined defined-benefit and defined-contribution system.

3. Individual Retirement Accounts, a scheme similar to defined contributions, are allowed for workplaces with less than ten workers.

4. As a per cent of the total. DC stands for defined contribution.

23. According to the Ministry of Labour, only 226 workers in 37 workplaces in 2006 and 584 workers in 160 workplaces in 2007 received this subsidy.

Source: Ministry of Labour.

48. At the current pace, it would take more than 15 years to cover just one-half of regular workers in company pension plans. The decision to introduce a company pension while maintaining the retirement allowance reflects the difficulty of phasing out the latter, which is popular with workers. To accelerate the transition to company pensions, the government should remove the preferential tax treatment for retirement allowances, which allow the lump sum to be taxed over a number of years at low rates, a more favourable arrangement than granted to company pension systems. The fact that the retirement allowance does not have to be funded outside the company provides advantages to firms.²⁴ In addition, the government should encourage DC plans in order to promote pension portability and thereby labour mobility. Given that the average employment tenure is only five years in Korea, a worker may be employed by as many as eight or nine firms during his/her career, making a DB system difficult to manage. To give firms even greater incentives to choose DC plans, the proportion of funds that have to be entrusted to financial institutions under a DB plan (60%) could be raised to 100%, as for DC plans.

49. Finally, greater emphasis on lifelong learning and training would likely improve the employment prospects of older workers more than employment subsidy programmes. Government expenditures on lifelong learning, including vocational training, amounted to only 0.1% of GDP in 2007 and the participation rate of adults in lifelong education was 29.8% (Table 14). The rate rises with the level of education, making it important to target less-educated persons.²⁵ However, training has to be carefully targeted to be effective (Injae Lee, 2008). The amount of firm-specific and ICT training provided at an enterprise is negatively correlated to its hiring of older workers. This suggests that a lack of firm-specific human capital and ICT skills is an impediment to hiring older workers.²⁶ Thus, general lifelong education and training may not be effective in raising the employment of older workers, but should be focused specifically on the needs of potential employers. In sum, the allocation of active labour market policies for older workers should be carefully based on the longer-run costs and benefits of each programme. While subsidies may provide benefits in the short run, they generally entail high deadweight costs (Martin and Grubb, 2001). Moreover, the continuous provision of wage subsidies may delay structural change and distort the composition of the labour force away from its optimal allocation by changing the relative cost of older workers relative to younger ones.

24. In contrast, firms that adopt DB schemes must entrust at least 60% of the funds to financial institutions and 100% in the case of DC schemes. In both cases, employers must provide payments at least as large as under the lump-sum retirement allowance.

25. The participation rate of those with a lower secondary school or below educational attainment increased from 9.1% in 2004 to 16.8% in 2007, thanks to increased government outlays.

26. The same study showed that firm size is positively correlated with the hiring of older workers, while the existence of a labour union correlates negatively, as they tend to oppose the hiring of new older workers.

Table 14. Per capita expenditure for lifelong education and participation rate in 2007

		Participation rate (%)	Per capita expenditure ¹
Total		29.8	142.8
Gender	Male	28.9	181.2
	Female	30.7	106.5
Age	25-34 years old	36.3	299.4
	35-44 years old	29.2	59.2
	45-54 years old	26.5	68.4
	55-64 years old	23.9	34.5
Educational attainment	Lower secondary or below	16.8	10.7
	Upper secondary	24.5	162.3
	University or more	39.4	148.0

1. Out-of-pocket expenditures, excluding public support, in thousand won.
Source: Ministry of Education, Science and Technology.

Conclusion

50. Korea has considerable scope to expand the use and improve the quality of its human resources. Specific recommendations to reverse labour market dualism, boost the participation rates of women and youth and raise the age when older workers leave firms are summarised in Box 2.

Box 2. Summary of recommendations on the labour market and education system¹

Reduce labour market dualism

- Liberalise employment protection legislation for regular workers.
- Expand the coverage of social insurance schemes to reduce firms' incentives to hire non-regular workers and provide better protection for such workers.
- Ensure that the newly implemented law to protect non-regular workers does not slow employment growth.

Raise female labour force participation

- Expand the availability of high-quality childcare by relaxing price controls on private-sector providers.
- Lengthen maternity leave and ensure that eligible persons are able to take maternity and parental leave, while encouraging the development of family-friendly workplaces.
- Reduce the use of seniority-based wages and reverse labour market dualism to provide better job opportunities for women.

Improve job prospects for youth

- Reduce mismatches between skills provided in tertiary education and those required in the labour market by strengthening links between universities and companies.
- Improve the quality of tertiary education by strengthening competition, which requires increased transparency about the performance of educational institutions, stronger accreditation procedures and regulatory reform to promote innovation.
- Expand public support for universities as the number of elementary and secondary students decline.

- Reduce the number of NEETs by reversing the upward trend in non-regular employment.
- Improve quality and efficiency of public education to curb demand for after-school tutoring, in part by bringing teachers' salaries more in line with average income.
- Follow through on the plan to allow more independent schools to promote both efficiency and quality.

Promote the employment of older workers

- Abolish the mandatory retirement system, thus helping to flatten the wage-seniority profile.
- Phase out the retirement allowance by accelerating the introduction of company pensions.
- Improve ALMPs by focusing on training rather than wage subsidies and direct job creation.

1. Recommendations in each section are ranked in order of their priority.

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