



Korea's Vocational Education and Training Policy: **Achievements, Limits and Future Challenges**



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HRD KOREA

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“The best HRD professional organization
to raise the value of people and companies”

Major Functions of HRDKorea

Since its establishment,
HRDKorea has recognized
the importance of having
a competence based and
highly skilled society

Competency Development

Supporting foreign workforce

Keep quality talent for
SME's and give a chance to
realize dream for foreign
workers



Overseas job placement

Provide a full-service from
job offering consulting,
registration, and departure
to target country



Competency Assessment

Skills competition

By succeeding the value of
technology and skills and
by improving them, we
achieve prominence as a
key power of the world

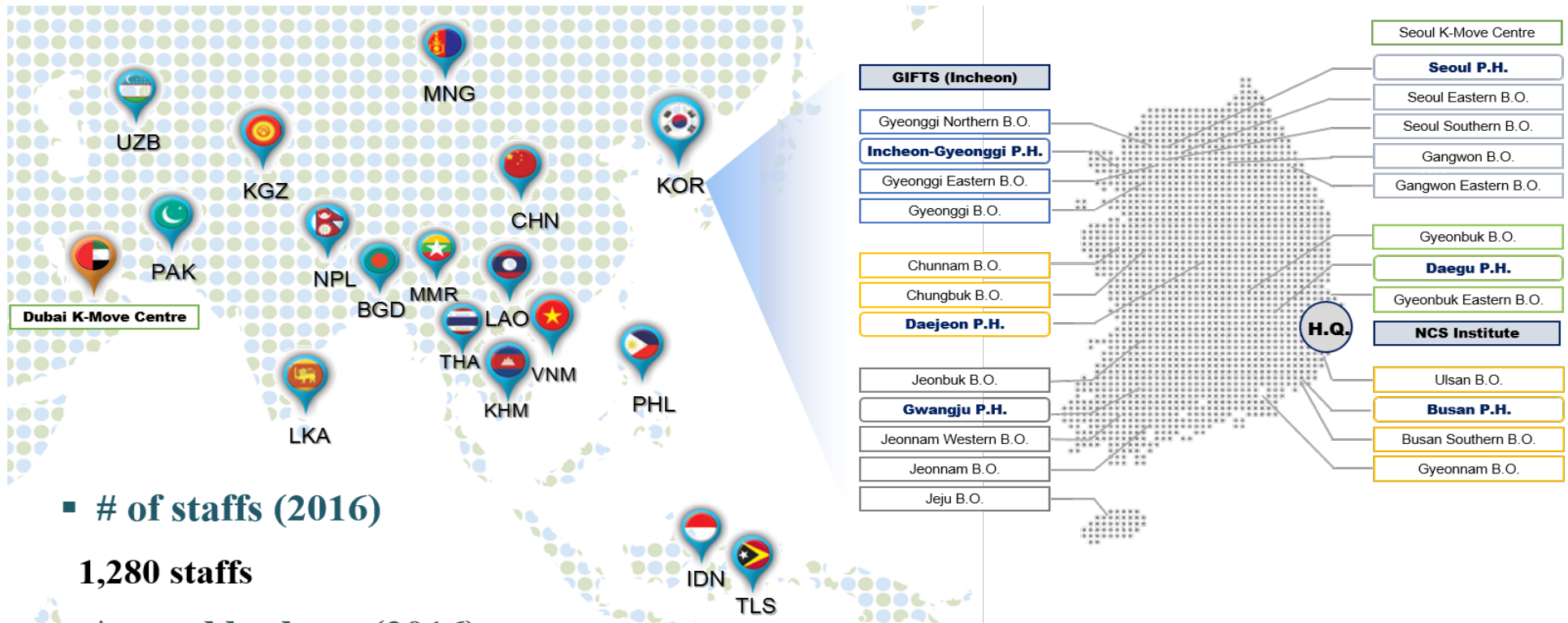


International cooperation

We exchange advanced
information and technology
through international
cooperation



Introduction to HRD Korea



- **# of staffs (2016)**

1,280 staffs

- **Annual budgets (2016)**

1,345,529 million(KRW) / 1,152 million(USD)

- **Organization:**

Head quarters : 3 Vice Presidents, 1 Unit, 12 Bureaus and 43 teams

Attached organization : 1 Unit, 1 bureau and 5 teams

Agencies : 6 regional headquarters, 18 branch offices, 6 qualification examination centers, 16 EPS Centers

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I. Korea's Vocational Education and Training (TVET) System

II. Developments of Korea's Vocational Education and Training

III. Challenges for Korea's Vocational Education and Training

Korea's TVET: Dual Scheme

	Vocational Education	Vocational Training
Ministry concerned	Ministry of Education	Ministry of Employment and Labor
Implementing institutions	Vocational high schools Junior technical colleges Open colleges	Public vocational institutes In-plant vocational institutes Authorized vocational institutes Authorized vocational courses
	Life-long education institutes	Authorized vocational courses offered by life-long education institutes
Period of education/training	2 to 3 years	Depending on courses

Formal Education System of Korea

| Schooling System (6-3-3-4 pattern)

Graduate School

University (4 years)

Junior college (2~4 years)

General high school (3 years)

Vocational (Special, Meister) school

Middle school (3 years)

Elementary school (6 years)

kindergarten (3 years)

Institutions for Vocational Training (2014)

Classification		No.	VTIs/Remarks
Total		2,777	
Public VTIs	Sub-Total	79	
	Public Org.	40	KOPO, KUT, KEPAD (Korea Employment Promotion Agency for the Disabled)
	Local Govern.	8	Seoul, Other Provinces
	Min. of Justice	31	Inmates' Vocational Competency
Private VTIs	Sub-Total	2,698	
	Trg. Corporation	55	Non-profit Corporations
	WRD Center Women Resources Development	51	Women's Vocational Competency
	MOEL Designated	823	Individual Designated VTIs, KCCI (Korea Chamber of Commerce and Industry)
	Others	1,769	Companies of Associations, etc.

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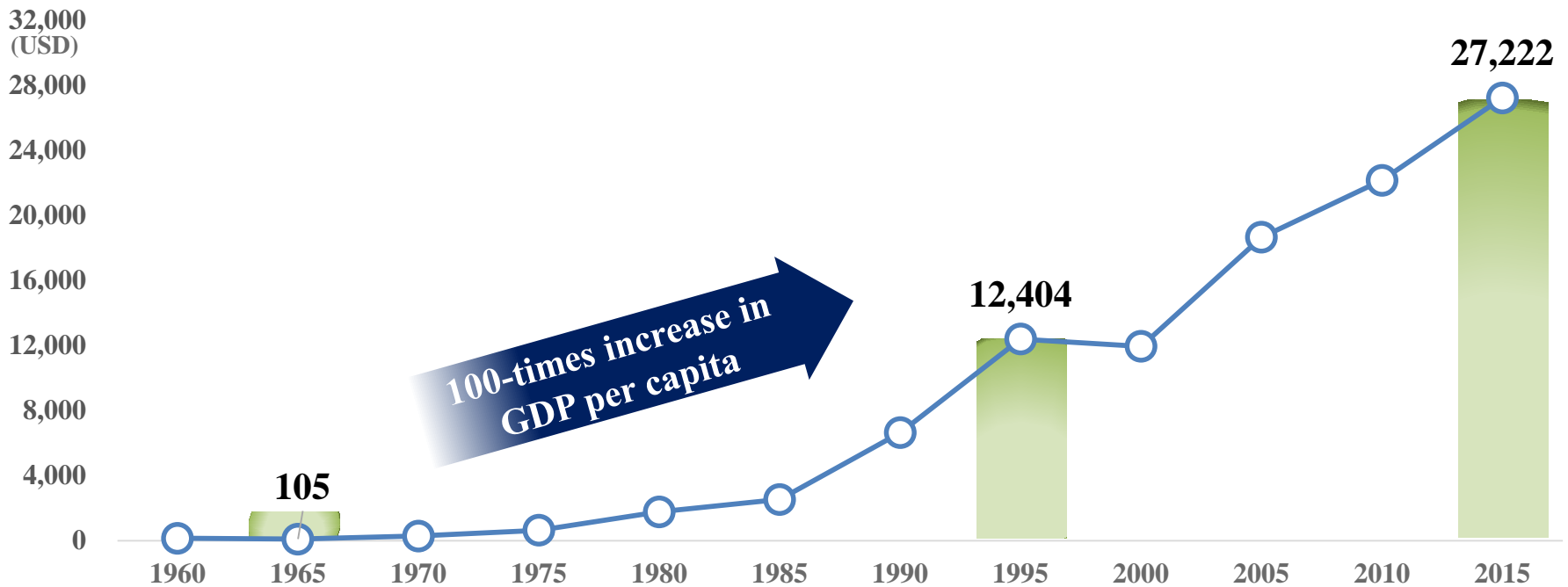
I. Korea's
Vocational Education and Training (TVET) System

II. **Developments of
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Changes in GDP per Capita since 1960s

Economy developed drastically



- **1965-1995** : 100-times increase in GDP per capita from around US\$100 (1965) to US\$10,000 (1995), only in 30 years
- **1995-2009** : Entering a new phase in GDP per capita: US\$10,000 in 1995 and US\$ 27,222 in 2015

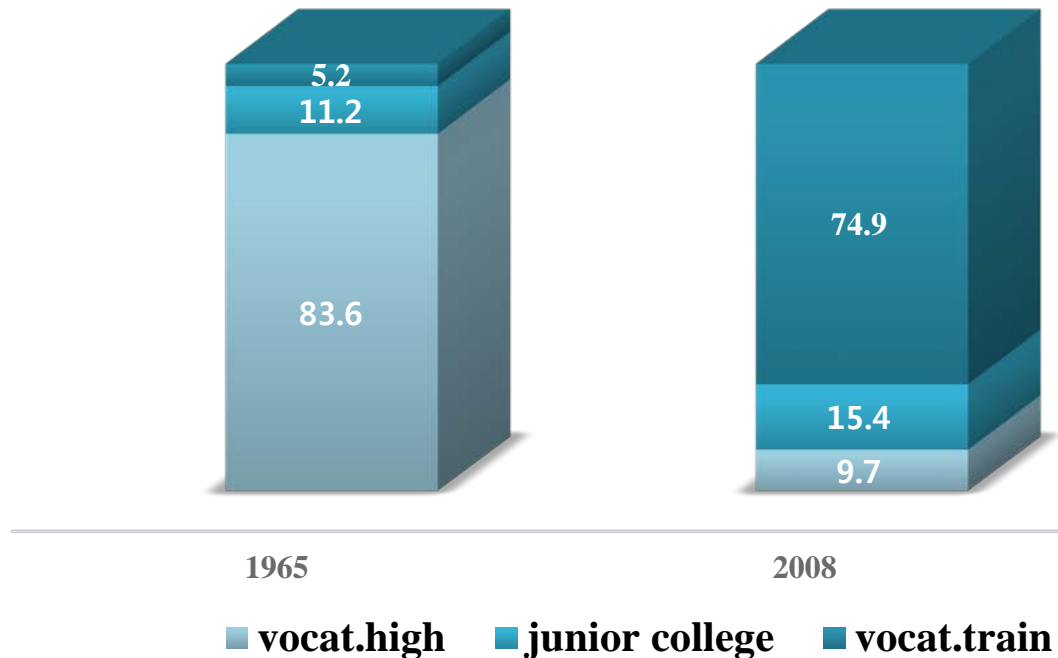
Factors of the Korean Economic Growth

- **Strong intervention of central government in the decision of development path and the allocation of resources including capital and labor**
 - ✓ **Implementing a series of “Five-year Economic Development Plans”**
 - 1st-7th : 1962 ~ 1996
- **Emphasis on Human Resource Development**
 - ✓ Rapid decrease of illiteracy (over age 12): 78% (1945) → 28% (1960)
 - Based on national movement led by the ministry of Education
 - ✓ Rapid expansion of Enrolment Rate
 - Enrollment rate to primary school : **Under 30% (pre-1945) → 95 % (1959)**
 - Enrollment rate to upper-secondary school : **3% (1951) → 20 % (1959)**
- ❖ **Even during the war, Establishment of national public universities and the promulgation of the "Wartime Emergency Education Act".**

Factors of the Korean Economic Growth

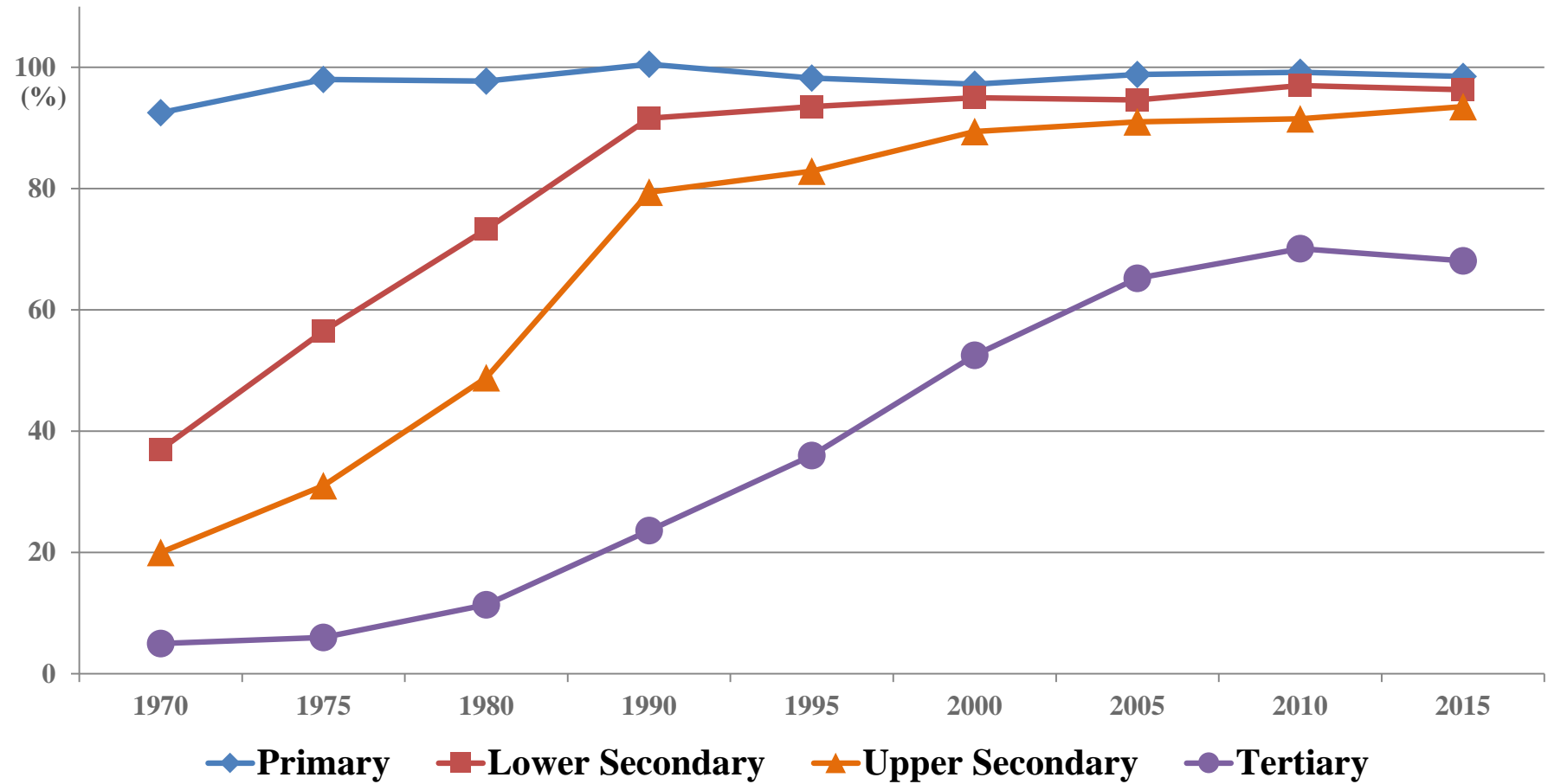
■ Close alignment of TVET with changing skills needs

- **Industrialization period:** Expansion of initial VET through secondary vocational education and compulsory vocational training
- **Post-industrialization:** More emphasis on higher-level and continuous VET through vocational colleges and Vocational Ability Development scheme

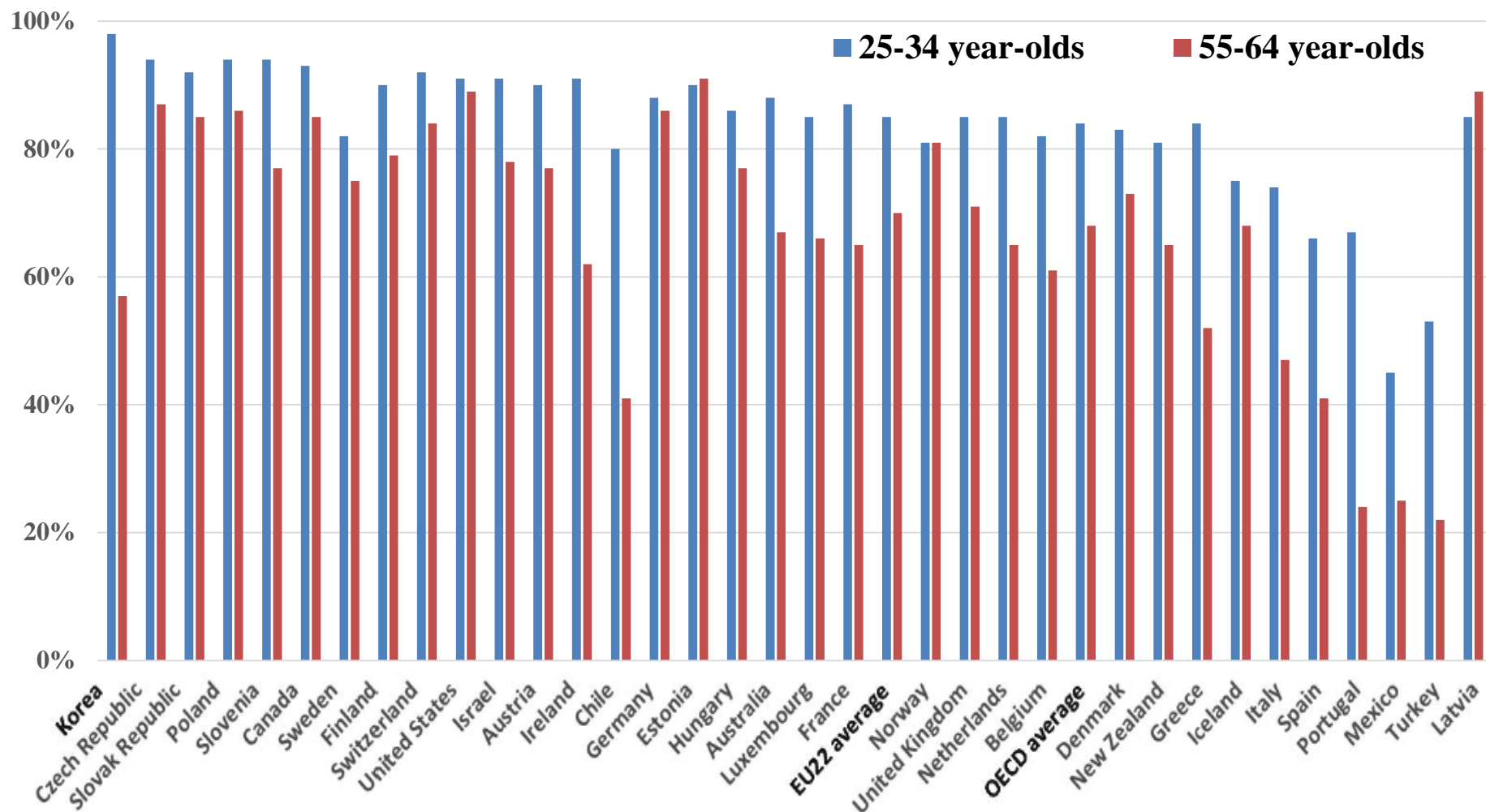


Factors of the Korean Economic Growth

Rapid and incremental expansion of Enrolment Rate



Comparison of the High School Completion Rates in OECD Countries by Ages



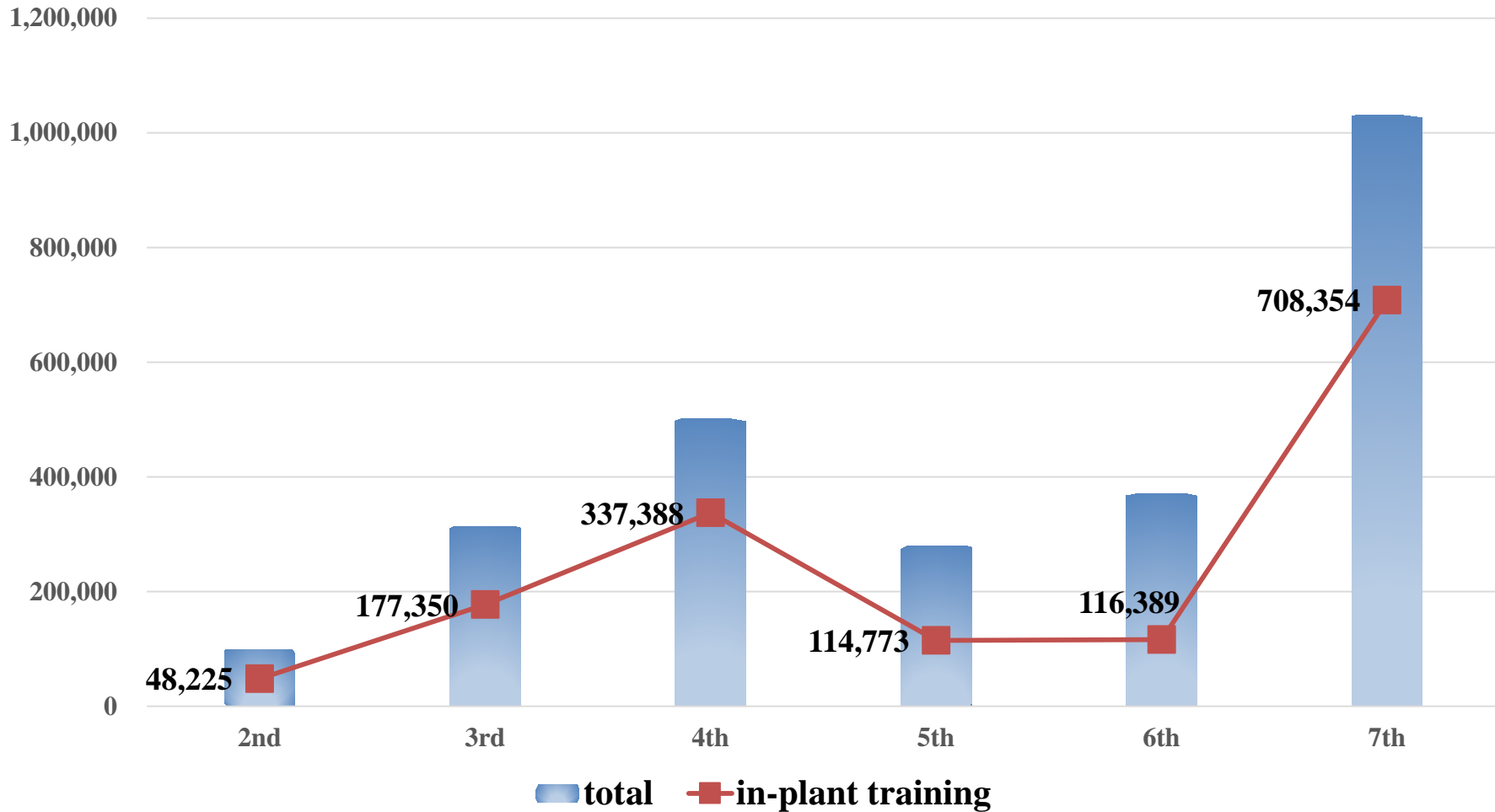
Source: OECD (2015), Education at a Glance 2015

Rapid expansion of TVET

Changes in TVET Participation (1965 - 2008)

Category	Types of TVET		1965	2008
Number of VET participants (unit: person)	Vocational Education	Vocational schools	172,436	487,492
		Junior colleges	23,159	771,854
		Subtotal	195,595	1,259,346
	Vocational Training	Pre-job training	Seoul, Other Provinces	156,000
		Vocational training of the employed	0	3,601,000
		Subtotal	10,738	
	Total		206,333	5,016,346
Proportion of VET participants (%)	Among aged over 15yrs		0.5	12.5
	Among those aged 15-64 yrs		6.1	14.6

Number of Trainees who underwent Vocational Training During the 2nd to 7th National Economic Development Plans



Vocational Training and Government

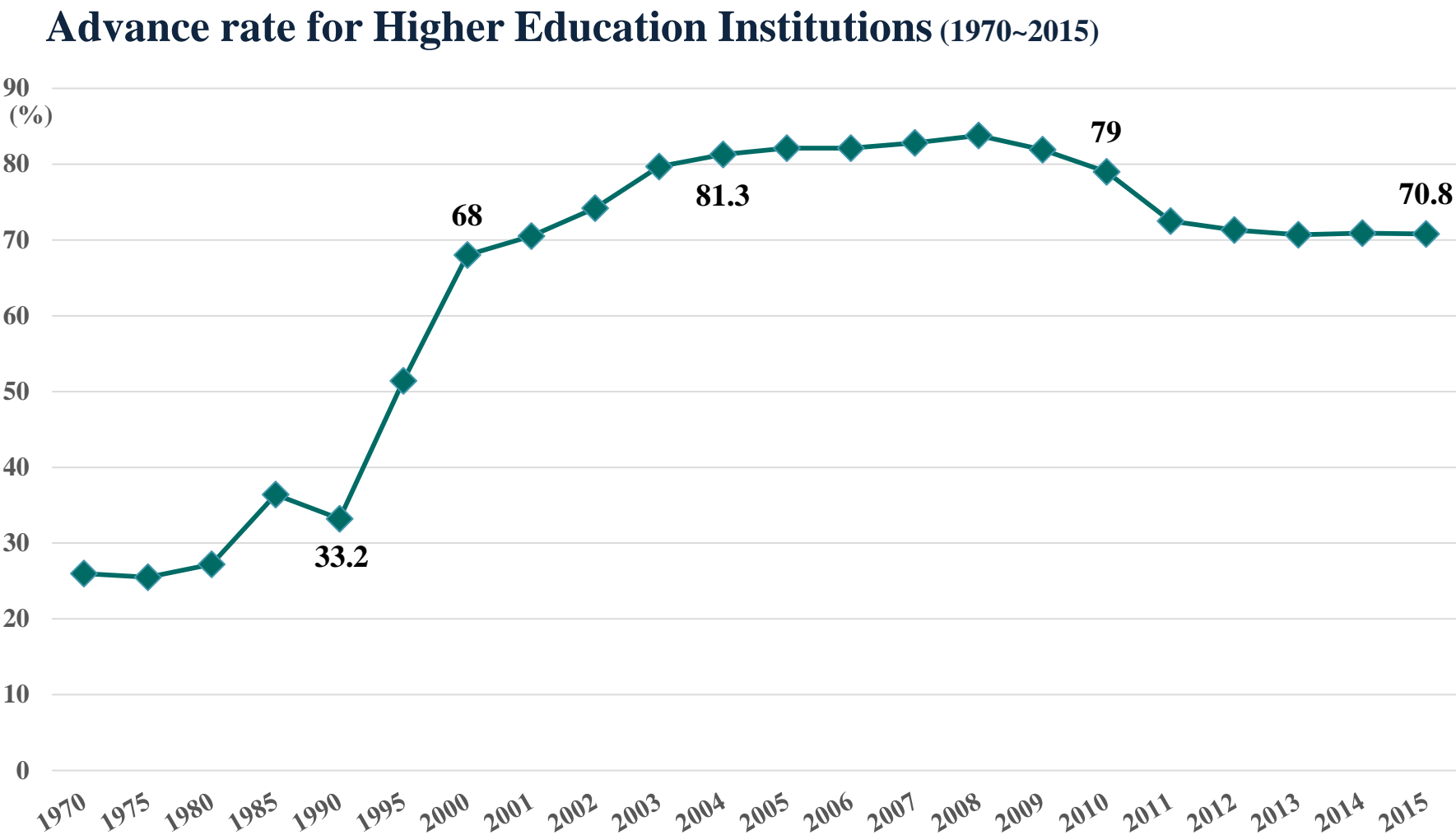
- **‘Vocational Training Act’ (1967)**
- **‘Act on Special Measures for Vocational Training’ (1976)**
- **‘Employment Insurance Act’ (1995)**
- **‘Vocational Training Promotion Act’ (1999)**

- ✓ **Employment Insurance Scheme** under the authority of the Ministry of Employment and Labor (MOEL)
- ✓ Three pillars: 1) Job Skills Development Program
2) Employment Stabilization Program
3) Unemployment Benefits

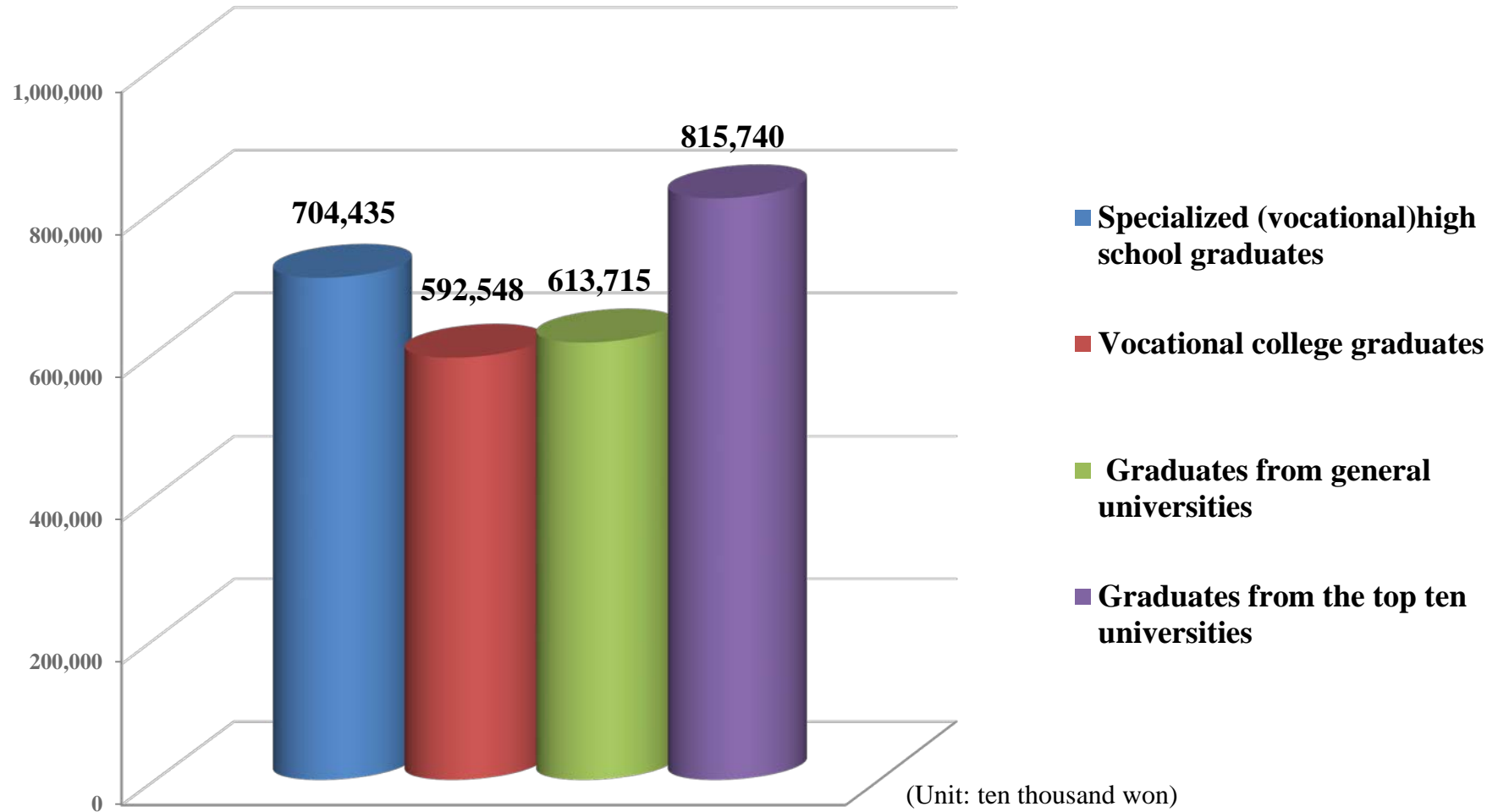
TVET and Economic Development

Economic development and labor market	Vocational education	Vocational training
Take-off phase (1961-72)	Development of VE (1960s-70s)	Before enactment of the Vocational Training Act (until 1967)
Heavy-chemical industry Promotion phase (1972-79)		Introduction of the VT system: since the enactment of the Vocational Training Act until the enactment of the Act on Special Measures for Vocational Training (1967-74)
Early stage of globalization (1980-86)	Stagnation of VE at high Schools, and restructuring and quality improvement of junior colleges (1980s)	Implementation of the mandatory VT system: since the enactment of the Act on Special Measures for Vocational Training until the introduction of the Employment Insurance Act and the Vocational Training Promotion Act (1975-98)
Democratization and the Korean Economy (1987-1997)	Revival of VE (early 1990s) Deregulation of university establishment and stagnation of VE (1995-2008)	
Asian Financial Crisis, IMF Bail-out program and the Korean economy (since 1998)	Introduction of the employment First-Advancement to university Later policy and VE (since 2009)	After the introduction of the Vocational Training Promotion Act Changed role of the Public sector-providing support for private VT (since 1999)

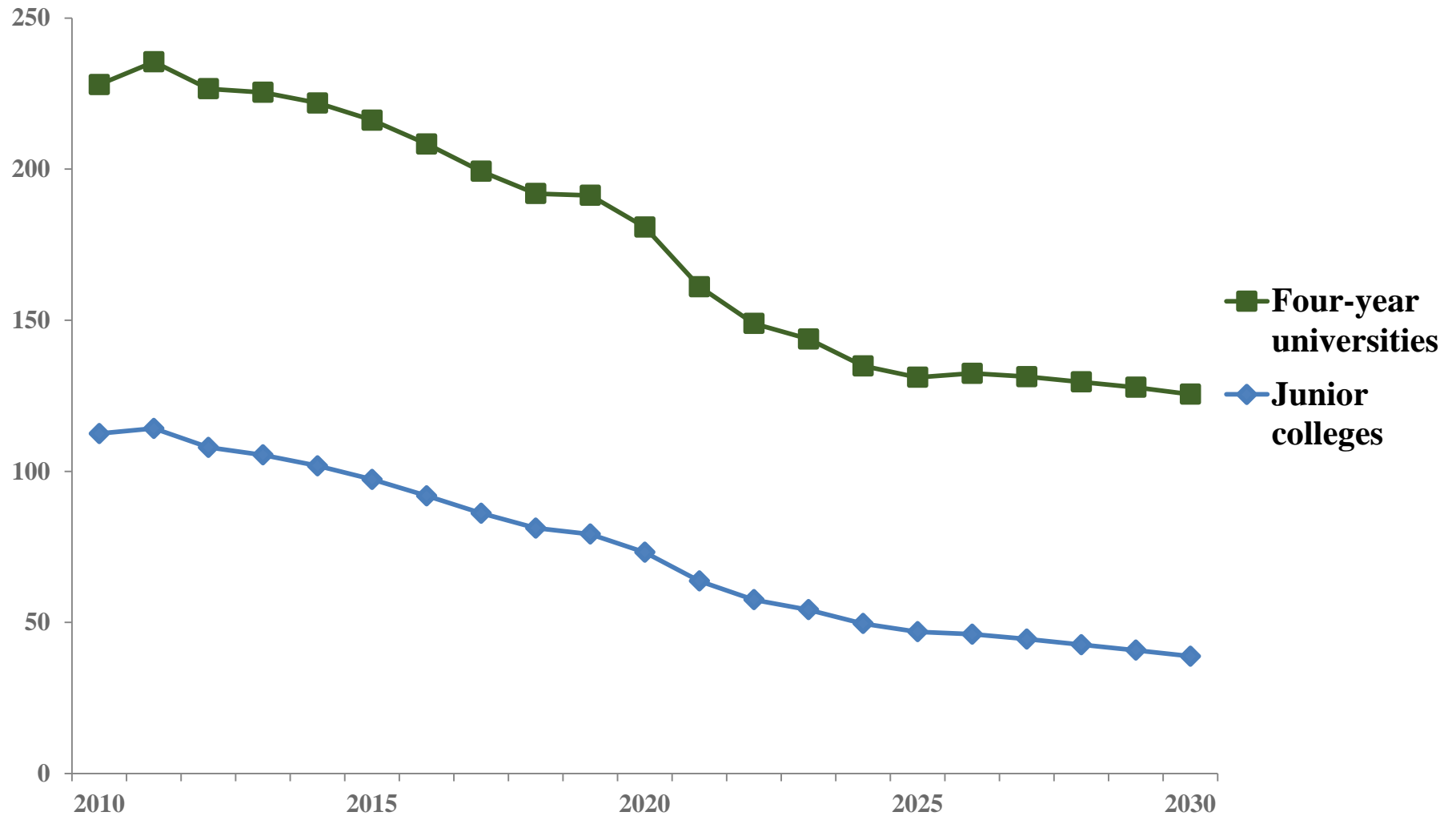
Advance rate for Higher Education Institutions



Lifetime Wages by Educational Attainment



The Forecast of the Enrollment Rate for Junior Colleges and 4-Year Universities



Achievements: Benchmarking Model for Developing Economies

- In the early stages of industrialization, it helped to supply abundant high-quality labor in a timely manner which leads the rapid economic growth. Under the framework of employment insurance system, all the firms, workers and unemployed persons were absorbed as a subject of vocational skills development policies.
- Conduction of large-scale training for the unemployed during the 1997's Asian financial crisis played a role as a social safety net.
- Since the 2000s participation in vocational skills development increased drastically.

- **Korea's higher education enrollment rate or its growth rate is one of the highest in the world.**
 - **High unemployment rates vs. labor shortages of SMEs.**
- **By contrast, Korea's adults' participation rate in education and training is lowly ranked among OECD countries**
- **Little interests in human resource development of own employees: Employers so accustomed to government-provided human resources**
 - **Supply-initiated vocational education and training: lack of teachers with actual workplace experiences**
- **Inequality of participation opportunities in vocational skills development**
 - **One thirds of workers are irregular and many of them are not covered by the Employment Insurance System**

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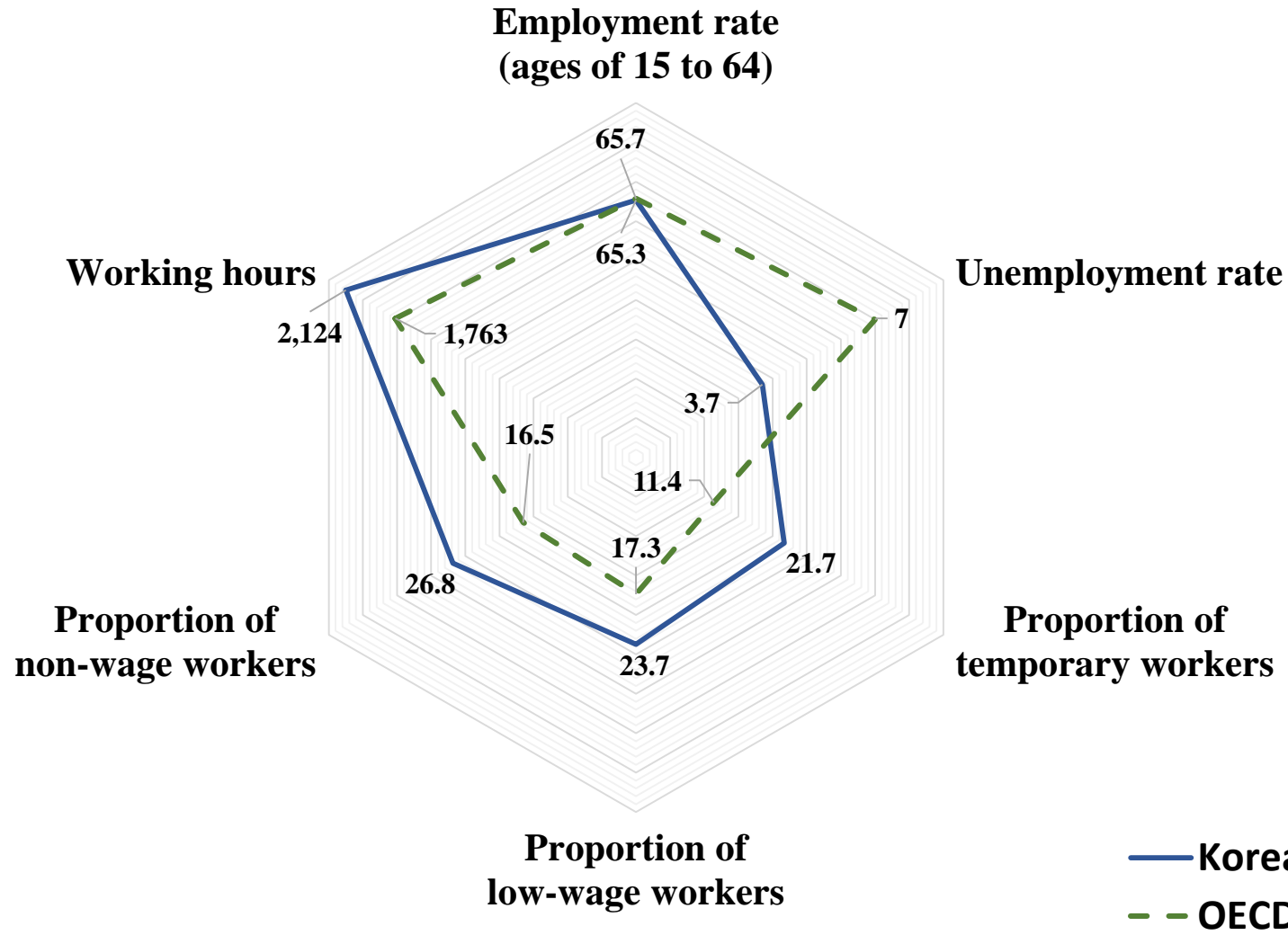
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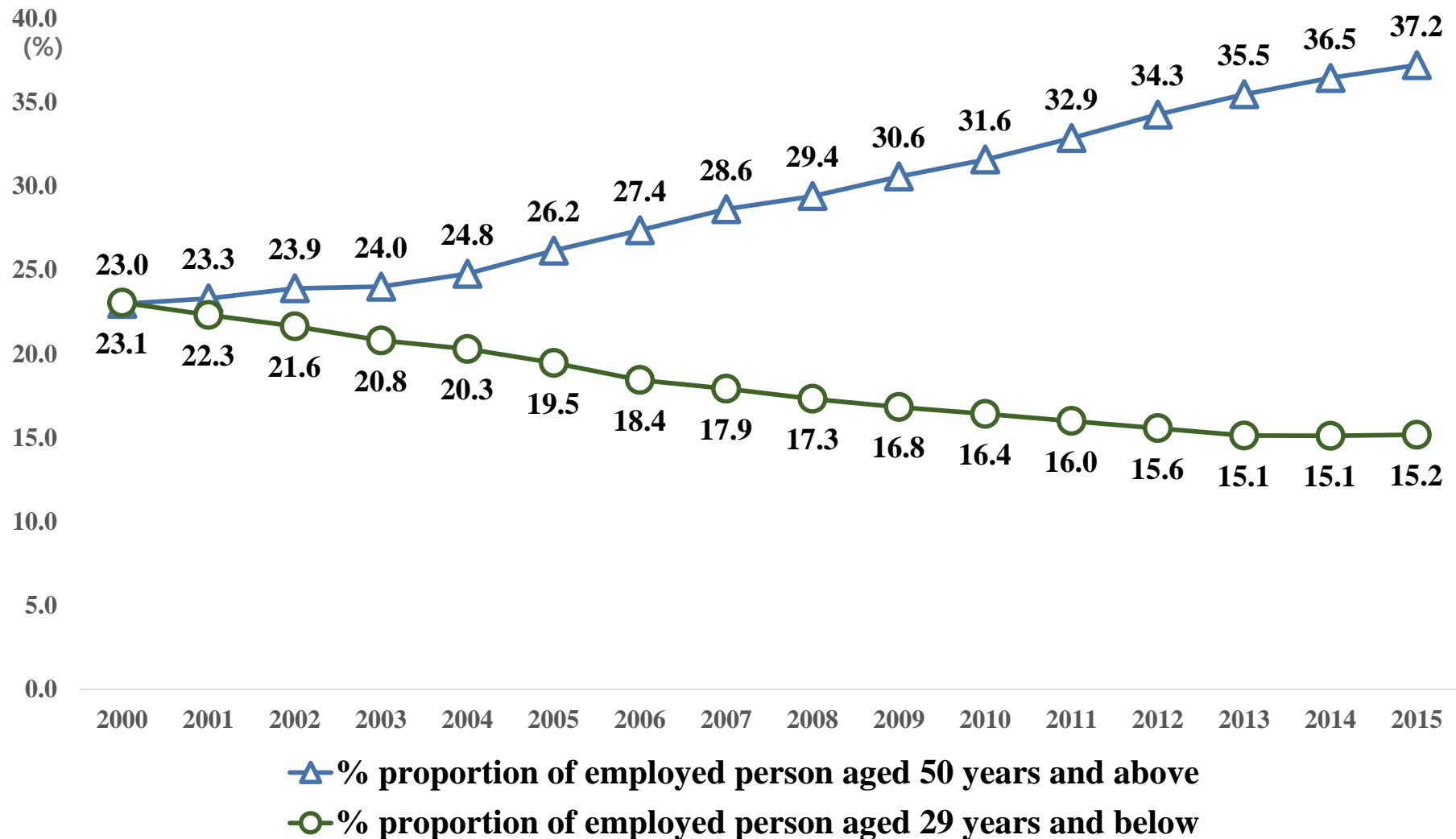
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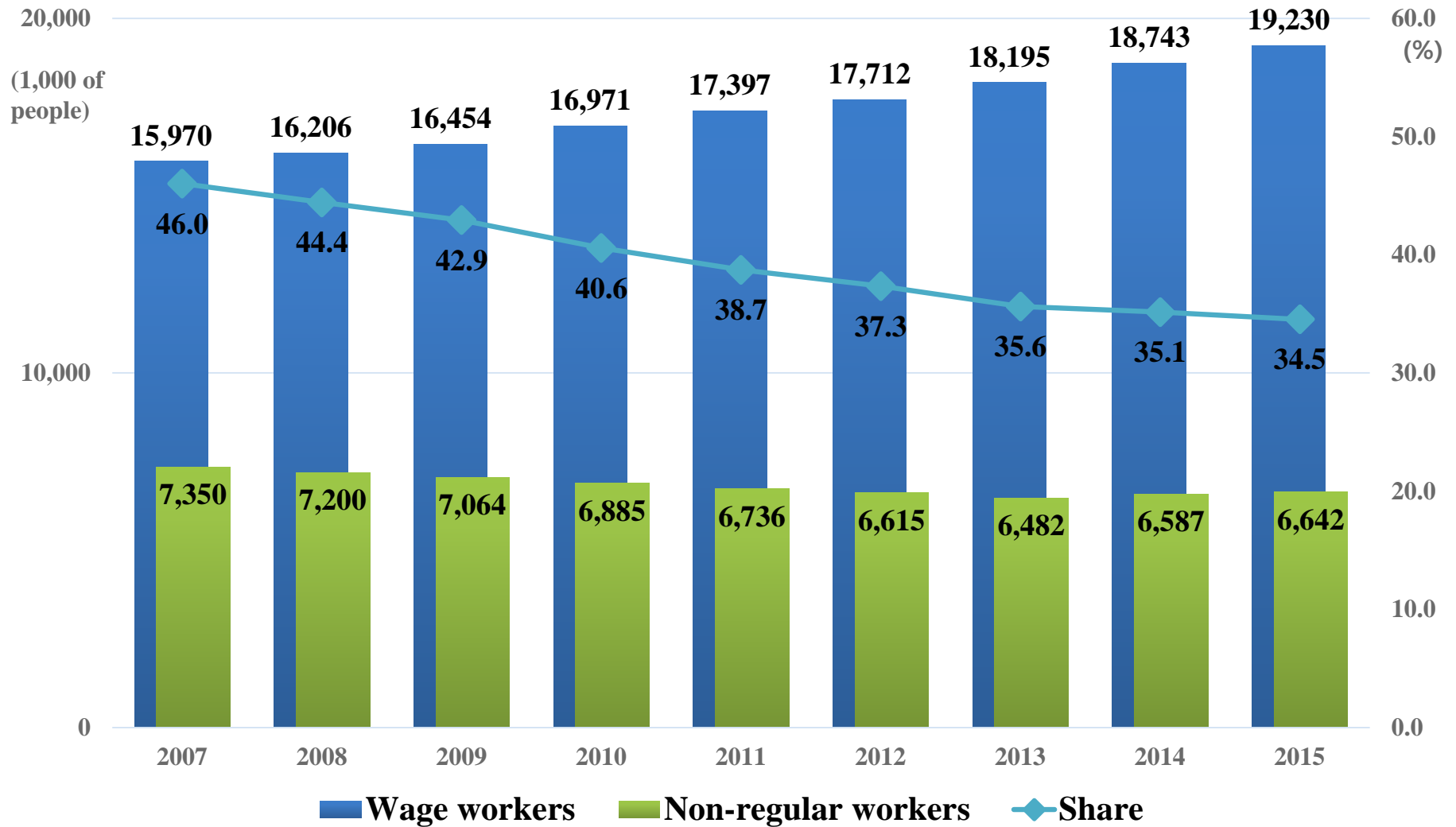
Comparison of Labor Market between Korea and OECD Average (2014)



Comparison of Elderly and Youth Employment Rate



Size and Share of Non-regular Workers



‘Employment first-University later’ Policy and Meister schools (Lee Myung-bak Administration)

| Reform of VE system for sustainable development

▪ Change of the name of vocational high school



✓ Together with change of name came changes in curriculum

▪ Establishment of Meister High School system

✓ Improved image of vocational education through establishment of quality vocational high schools

: Full financial support from gov't., a select few of elite schools (42 Meister high schools in the country: distribution by region) providing employment first-university later vocational education

‘Employment first-University later’ Policy Support System

In school

- Special high school scholarships
- Strengthening of on-the-job training
- Expansion of customized curricular
- Global Competency Development Program
- Core competency test/Task-oriented qualifications
- Industry experts as instructors
- Special high school-industry-junior college linkage
- Establishment of employment support system in Office of Education and school
- Reform of information disclosure system, etc.

Employment

- Skilled manpower recommendation system
- Youth internship program
- Employment target system in public organizations
- Delay of enlistment(24 yr. old), industrial technician system (7,000 persons), technician soldier system
- Basic livelihood security
- Corporate tax benefit system
- Strengthening of job placement function

Continuing education

- In-firm/Technology university
- Cyber university/ Open university
- Cyber university in technical fields(under discussion, KCCI)
- Special selection for workers
- Contract-based, industry commissioned education
- Academic Credit Bank System
- Skills development and training
- Scholarship for outstanding students from low-income families
- Loans and aids for school expenses, etc.

Meister High Schools (special vocational high school)

| Meister High School provides free education to produce young meisters (masters)

- **Opened in 2010**
- **The Ministry provides the graduates with the opportunities to be in stable employment after graduation, to serve in the army beneficial for career, and to enter college and workforce with 3-year work experience.**
- **Number of Meister High Schools: 40 (2016)**
- **Number of Meister High School students: 17,781 (2016)**

| Establish agreement and cooperative system between meister high school and industry

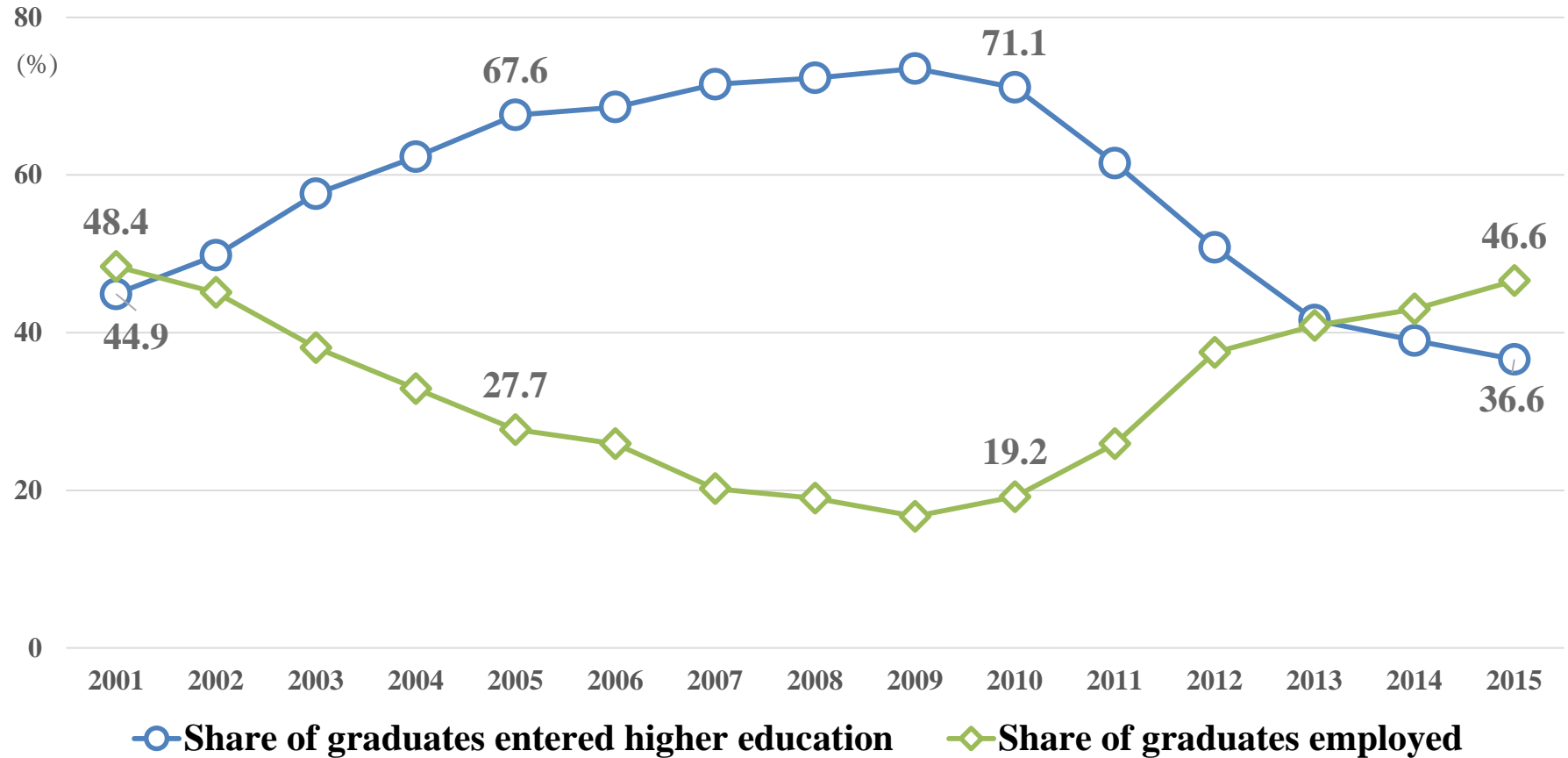
- 28 meister high schools made an agreement with 1,928 businesses (as of Feb. 2013) to establish cooperative network for education, technical support and employment.
- **MOU with Samsung Electronics (Dec. 2010)** - employed 113 students
- **MOU with Hyundai Motors (Mar. 2011)** - plans to employee 1,000 students for ten years
- **MOU between KITECH, Korea Craftsman Association and MEST (May. 2011)**
 - ✓ **KITECH: support for root industries (molding, casting, welding and plating)**
 - ✓ **Korea Craftsman Association : provide on-site experience and knowhow.**

| The Leading Model for TVE at Secondary Level

- ✓ Shows succesful school to work transition
- ✓ 90.3% of the first graduates are employed , 99.0% of them are reular employees, 59.2% of them are employed by cooperative business
- ✓ More than 80% finding jobs through school recommendations or open competition, proving that enterprise-need-based education is useful
- ✓ 82.5% planning for further studies; 78.4% of them planning to study while working
- ✓ 71.4% being satisfied with school education; 70.1% finding the school education useful for work
- ✓ Change in perception toward the vocational high schools
 - ❖ **Spillover effect**

Outcomes of the reform of secondary VE

Changing transition patterns of VHS graduates



Park Geun-hye Administration's Policies on TVET(I): MOEL-initiated Skills Development Measures

■ Development of industry demand-based National Competency Standards (NCS)

- ✓ Development of NCS for all fields to be completed during 2014 to constitute the DNA of industry demand-centered skills development
- ✓ Construction & operation of industry-led NCS maintenance and management system (2015~)

■ Promotion of NCS-based National Qualifications Framework & skills development

- ✓ Reform of the National Technical Qualifications system
- ✓ Strengthening of the supporting function of the public sector & provision of incentives to the private sector in order to develop NCS-based skills development programs
- ✓ Assistance & consulting provided to companies to help expand NCS-based human resources management in private companies

■ Establishment of a Korean dual system of work and learning

- ✓ Development & implementation of work and learning dual programs at upper and post-secondary levels
- ✓ Enactment of laws related to the dual system of work and learning, operation of joint training centers, development of on-site corporate instructors & competency development, etc.

■ Establishment of industry demand-oriented skills development system

- ✓ Industry demand-oriented skills development by region through regional HRD Committees (4 regional committees formed in 2013)
- ✓ Reform of the qualifications system & establishment of the dual system of work and learning of Sector Council –led NCS

Park Geun-hye Administration's Policies on TVET(II): Specialized High Schools

■ Development of specialized high schools linked to related ministries, local gov't & industry

- ✓ Government ministry-linked specialized high schools : 123 schools (2012) → 201 schools (2013)

■ Development & implementation of curriculum oriented towards National Competency Standards (NCS)

- ✓ Development of NCS & learning modules based on cooperative work system between Ministry of Education & Ministry of Employment & Labor
→ Development of 254 NCS & 55 NCS learning modules for 2013 and more development for following years
- ✓ Reform of curricula in specialized high schools and junior colleges based on NCS

■ Expansion of vocational education opportunities for students with talent, aptitude & willingness to work

- ✓ School transfers between general high schools & specialized high schools for career change
- ✓ Increased VE opportunities for general high school students
→ Expansion of commissioned VE providers, and designation & operation of VE-centered schools

■ Continued expansion of employment among high school graduates & establishment of degree-earning system for workers

- ✓ Expansion of univ. with special admission system for workers, and designation of univ. for late entrance into specialized · uncommon fields
→ Special selection for specialized high school students opting for work: 2.1% of the quota (2013) → 10.9% (2014)
→ 7 schools and 4 fields, including agriculture and horse farm
- ✓ National scholarship-supported overseas study & training system for specialized high school graduates working in industry as skilled technicians and craftsmen

Park Geun-hye Administration's Policies on TVET(III): Junior Colleges

■ Development of 100 specialized junior colleges

- ✓ Generation of 150,000 core industrial manpower per annum for knowledge-based industry & creative economy
→ Approx. 70 schools (2014) → approx. 80 schools (2015) → approx. 90 schools (2016) → 100 schools (2017)

■ Diversification of study years & degree programs in junior colleges

- ✓ Diversification of terms of study to 1~4 years in junior colleges based on NCS and industry demand

■ Establishment & development of meister graduate schools for industrial technology

- ✓ Establishment of special graduate schools for highly skilled persons in specialized fields including World Skills Competition winners & meisters
→ Establishment & authorization of 1 school in each of 4 regions (25 persons/school, 100 graduates/annum)

■ Development of lifelong vocational education university

- ✓ Development of lifelong VE univ. providing NCS-based module-type curricula for adults, workers & the unemployed
→ Development of 16 schools in total, including 8 schools (2014) & 8 schools (2015)

■ Promotion of globalization project

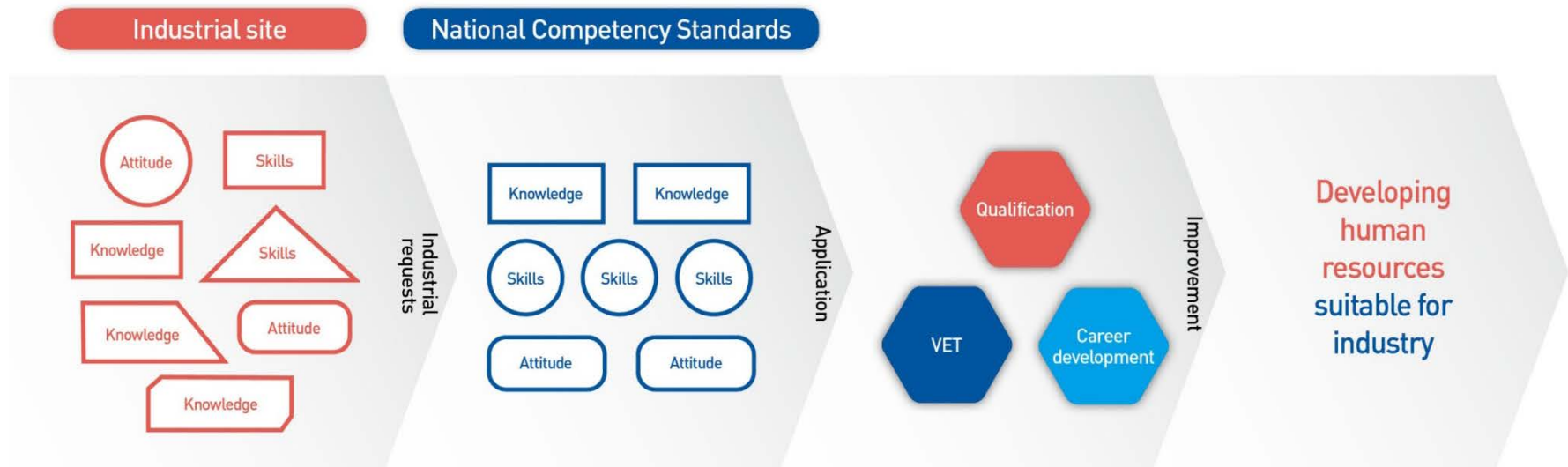
- ✓ Reinforcement of global employability of junior college students & development and supply of talented manpower for Korean industry in overseas markets
→ Target of 600 or more persons per annum sent abroad from 20 projects

National Competency Standards (NCS): System reform for sustainable development

NCS defines skills a person should be able to demonstrate at work by occupation at national level

- **Improvement in TVET system in response to environmental changes:
Introduction of NCS in curriculum**

➡ Transforming theory- & process-oriented education & training system into job- & result-oriented education and training system



*** Conceptual model of National Competency Standards (NCS)**

National Competency Standards (NCS): Why NCS?

- **improving suitability of education, training and qualification for work**
- **improving employability of learners (education, training)**
- **link between education, training and qualification**
 - ➔ prevents overlapping investment
- **promotes work-based life-long learning**
- **promotes globalization of qualification (compatibility)**



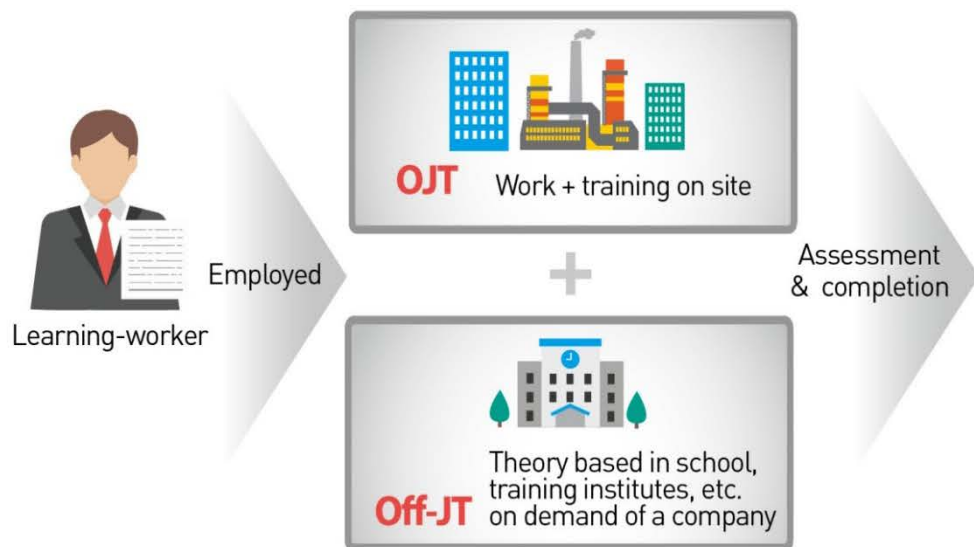
Work-Learning Dual System: Background

- **Skills mismatch** due to over-education of the youth
 - difficulties for job-seekers, firms need to **re-train** workers
 - lowers GDP growth rate
- Need to benchmark successful practices of OECD countries in **work-based learning**
- Introduce **Korean version of Work-Learning Dual System**
 - teach the skills required at work in workplace and evaluate & accredit
 - compatible in labor market
 - improve the existing practical training
- Encourages participation of firms, employer association in creating practical training programs (subsidies)

Work-Learning Dual System: Introduction

A new paradigm of TVET “Apprenticeship customized for Korea”

Training program based on NCS



Certificates

A new TVET program based on NCS lead by companies

In-company trainers train learning workers in a company instead of school or vocational training institutes; and the workers will be given certification by government and industry.
(training duration : 0.5~4 yrs)

Work-Learning Dual System: System reform for sustainable development

- **Improvement in TVET system in response to environmental changes:**
 - ➔ **Introduction of job-oriented education system through dual system of work & learning**
- **Companies select high caliber workers, education and training curricula combine OJT and Off-JT**
- **Academic achievement or qualification is granted upon evaluation of results following completion of education and training**
- **Companies : Manpower utilization**
Individuals : Income earning through employment + Possibility of acquiring both academic achievement & qualification
- **Similar to apprenticeship system in Europe, wage is partially supported by the government**

Work-Learning Dual System: Major features

- **Target group: job seekers aged 15-29**
(including seniors of high schools and colleges)
- **Target company: more than 50 employees (Joint VTC type : 20↑)**
- **Duration: 6 months - 4 years, depending on job (300~1,000 hours per year)**
(Minimum condition : OJT 50%, Off-JT 20%)
- **For manufacturing industries (mechanic, engineering, electric, etc.) and service industries, where low and medium skilled workers are required**
- **Training program is developed with National vocational qualification based on NCS relating level**
- **Internal and external assessment to verify the program for learning workers**

Work-Learning Dual System: Expected Outcomes

Labor Market

- ⊙ A quick solution for Skill Deficit
- ⊙ Improvement in Education and Training to rely on labor market needs
- ⊙ Improvement on signal for the selection of manpower needed at the field

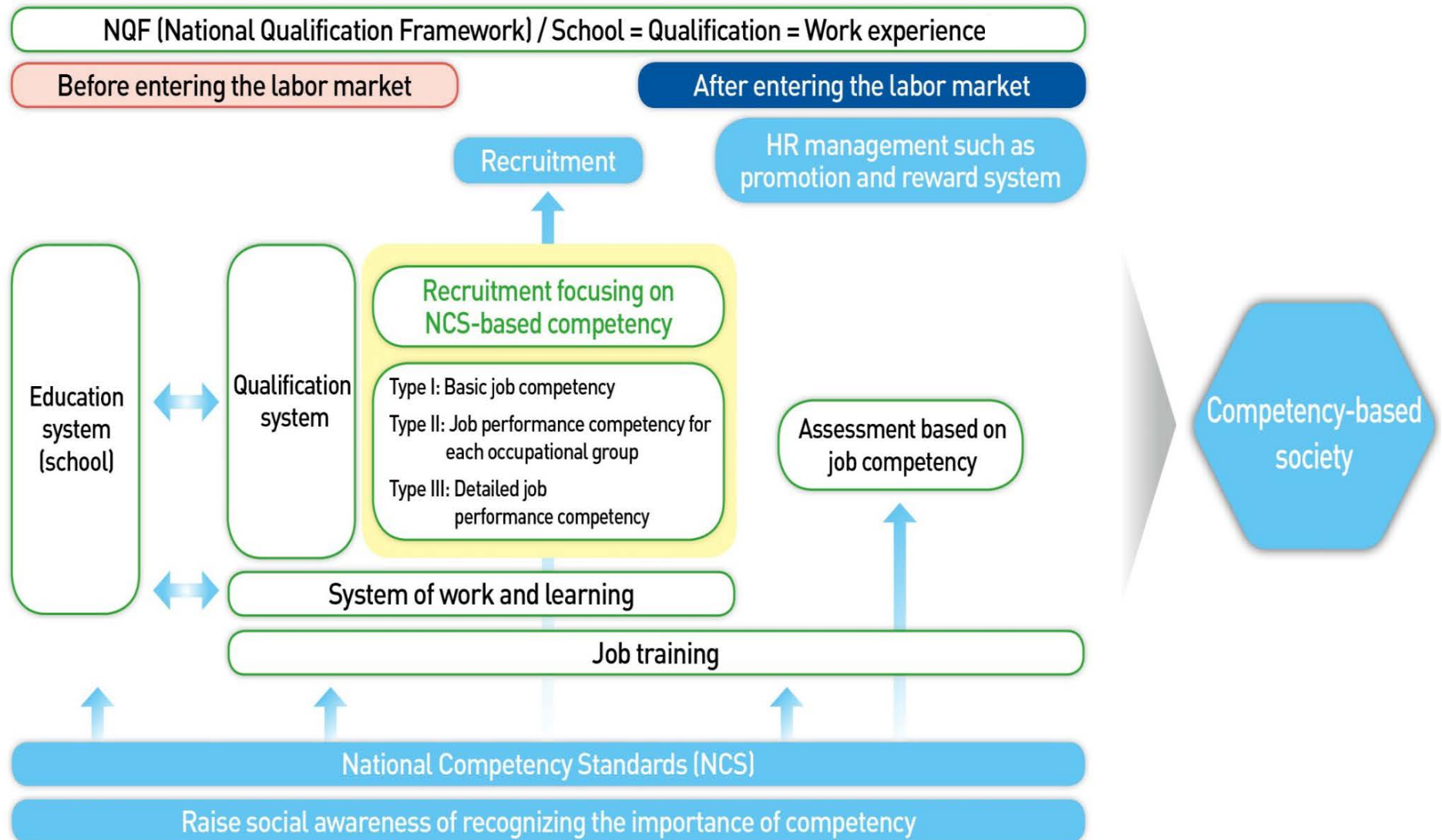
Employers (Company)

- ⊙ Selection and preoccupation of the superior manpower
- ⊙ Cost reduction of OJT and Settlement in current work

Employees (Job-seekers)

- ⊙ Ensuring opportunities to learn while working
- ⊙ Improvement in Job skills and Work adaptability

Future Challenges: Realization of competency-based society





Thank you

"Better Skills, Better World"

HRD KOREA

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