

Key Features of Korea's Income Inequality and Proposals for Inclusive Growth

Youngsun Koh (KDI)

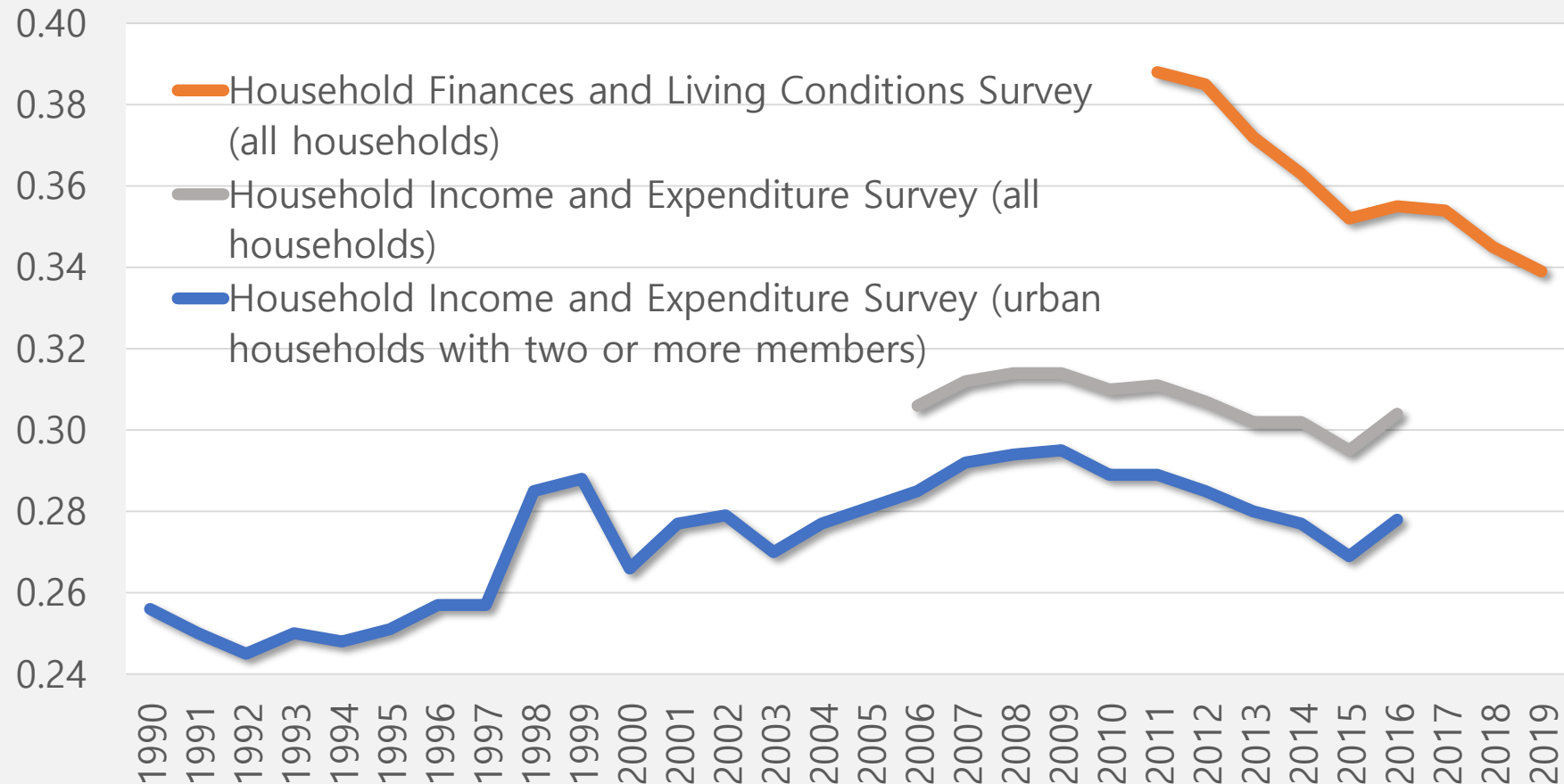
October 2021



Inequality: Trend and International Comparison

Income inequality rose in the 1990s and 2000s but fell in the 2010s and 2020s.

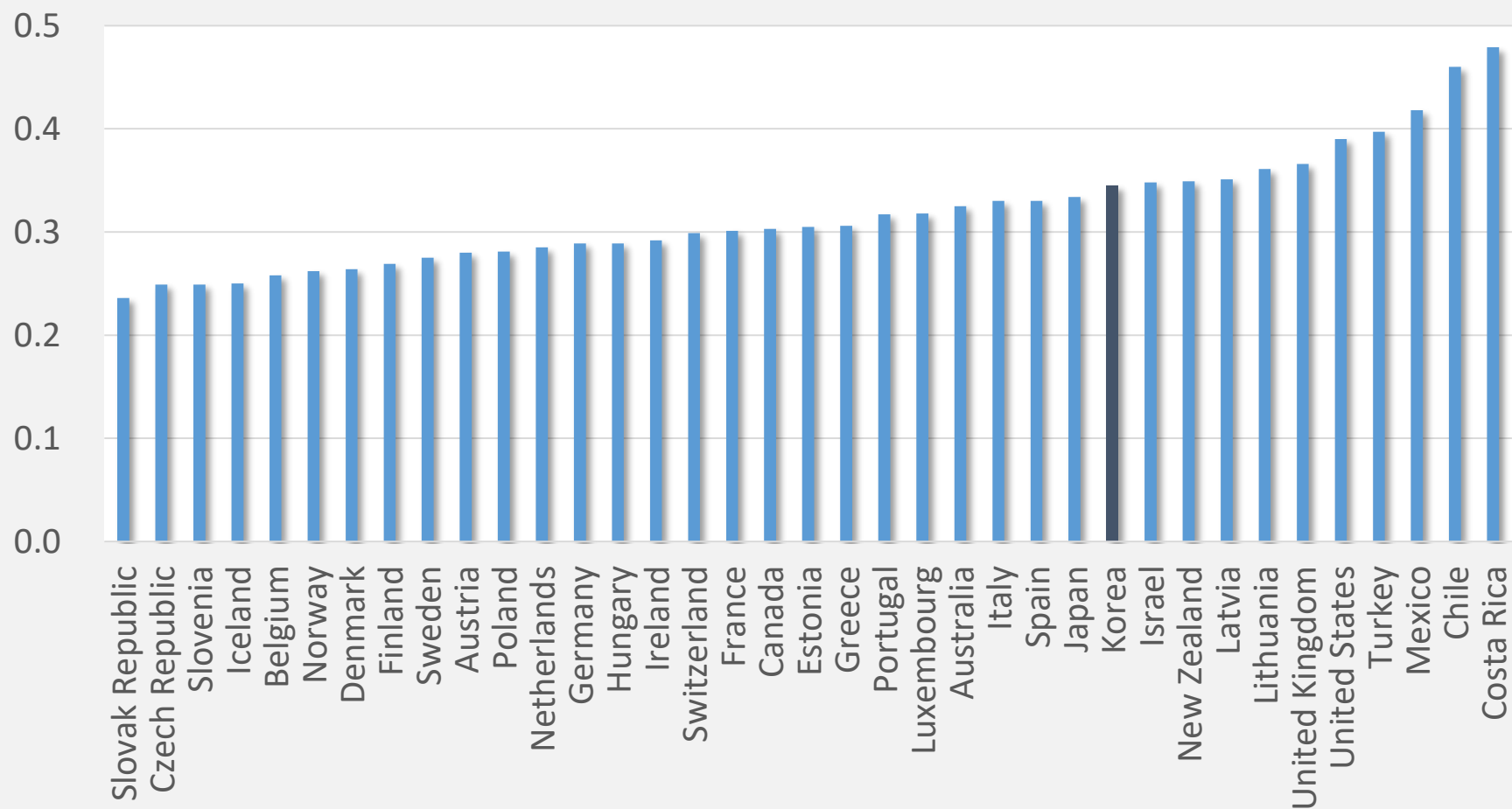
Gini coefficients (disposable income)



Source: Statistics Korea (<http://kosis.kr>).

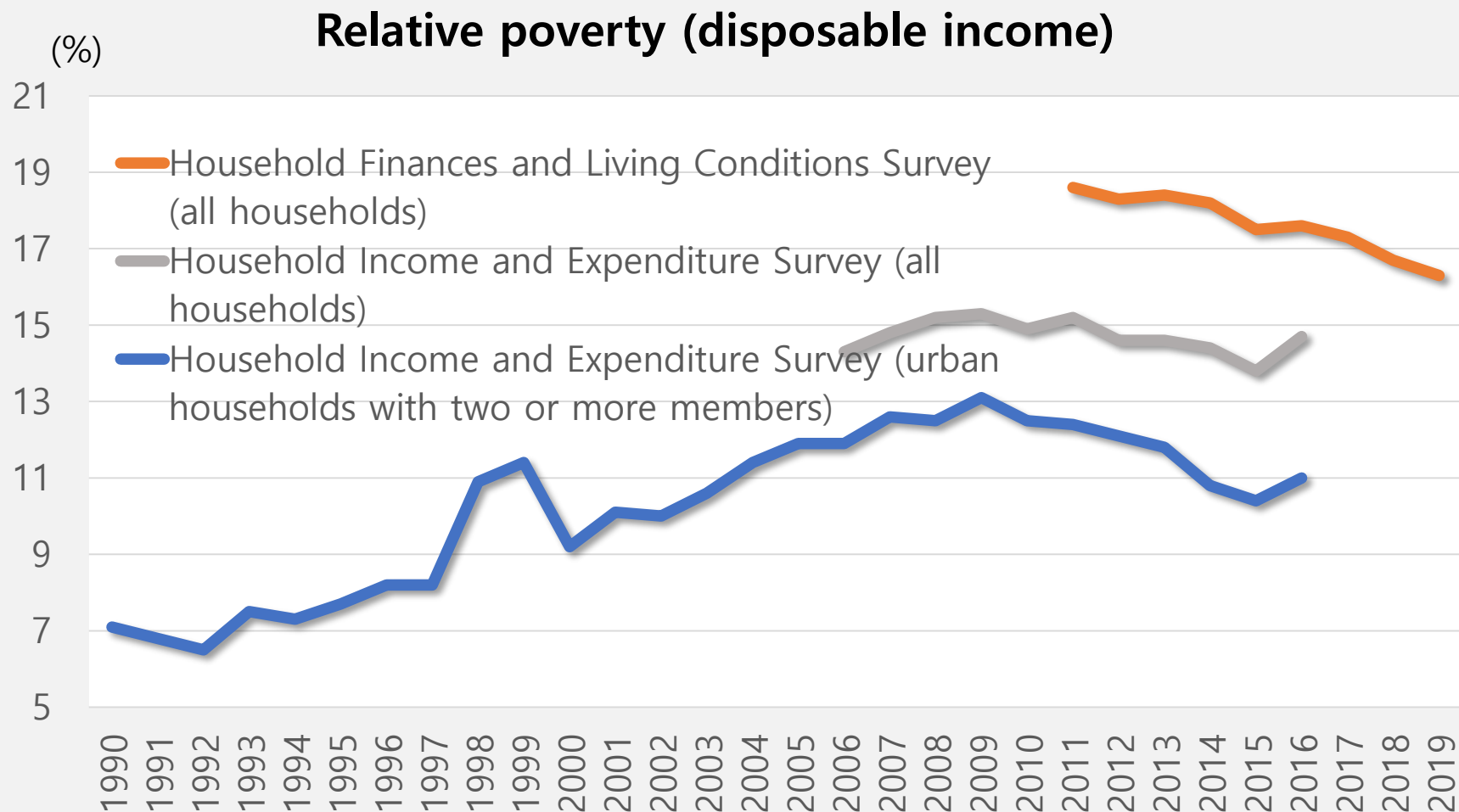
Gini is high, but not very high compared to other OECD countries.

Gini coefficients (disposable income, 2018 or the latest)



Source: OECD (<http://stats.oecd.org>).

Relative poverty shows a similar trend.

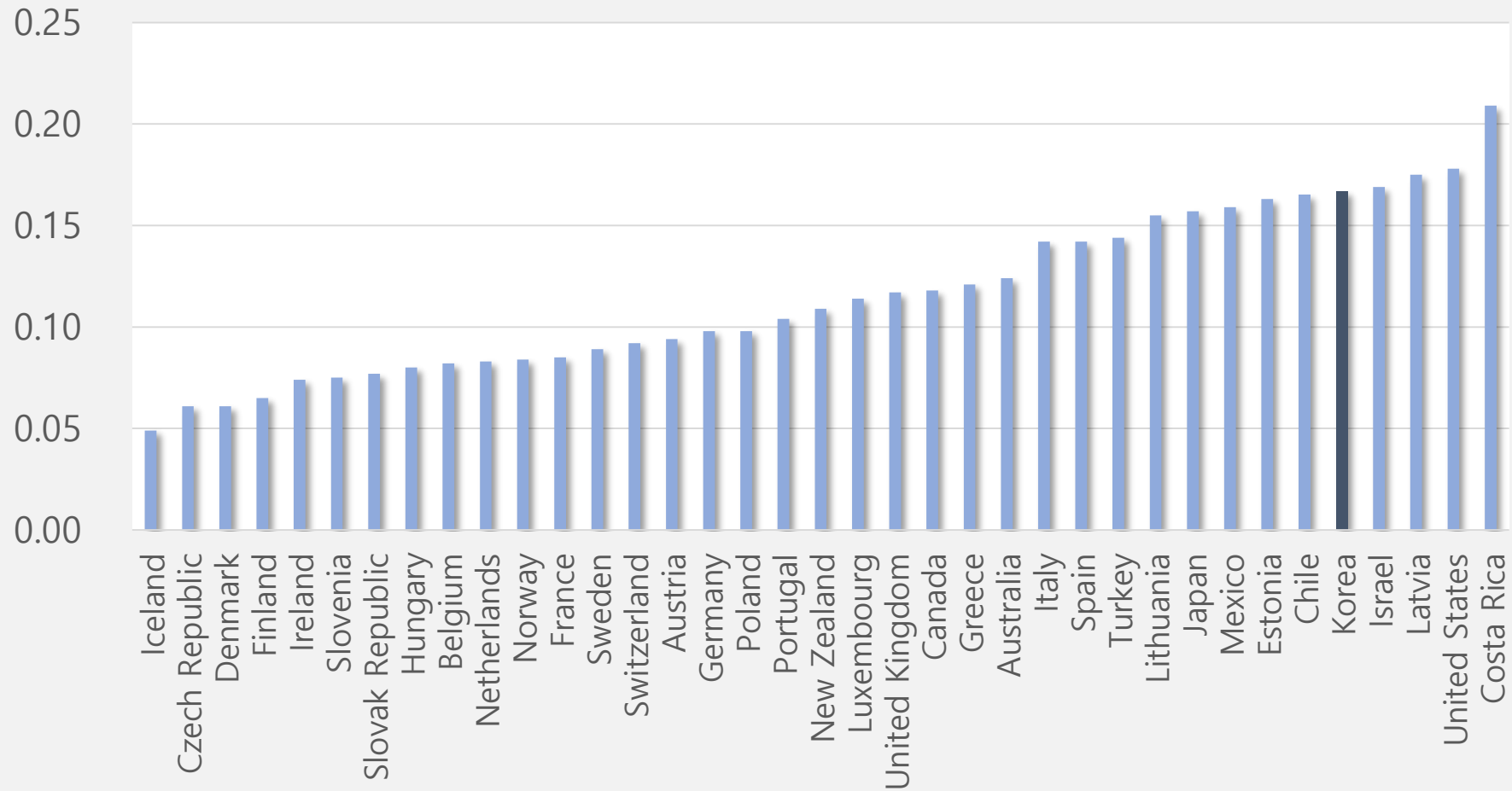


Note: The poverty line is set at 50% of the median income.

Source: Statistics Korea (<http://kosis.kr>).

Relative poverty is rather high.

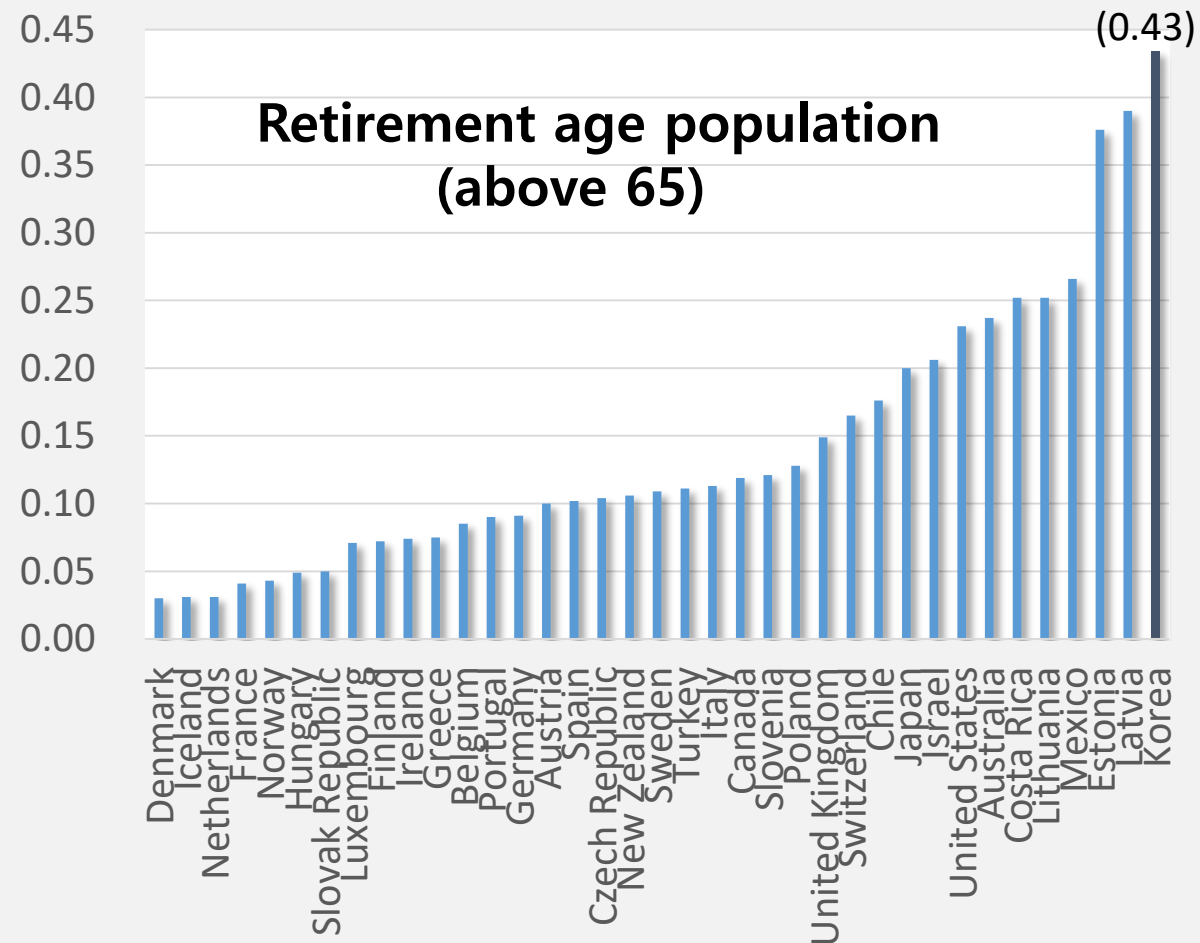
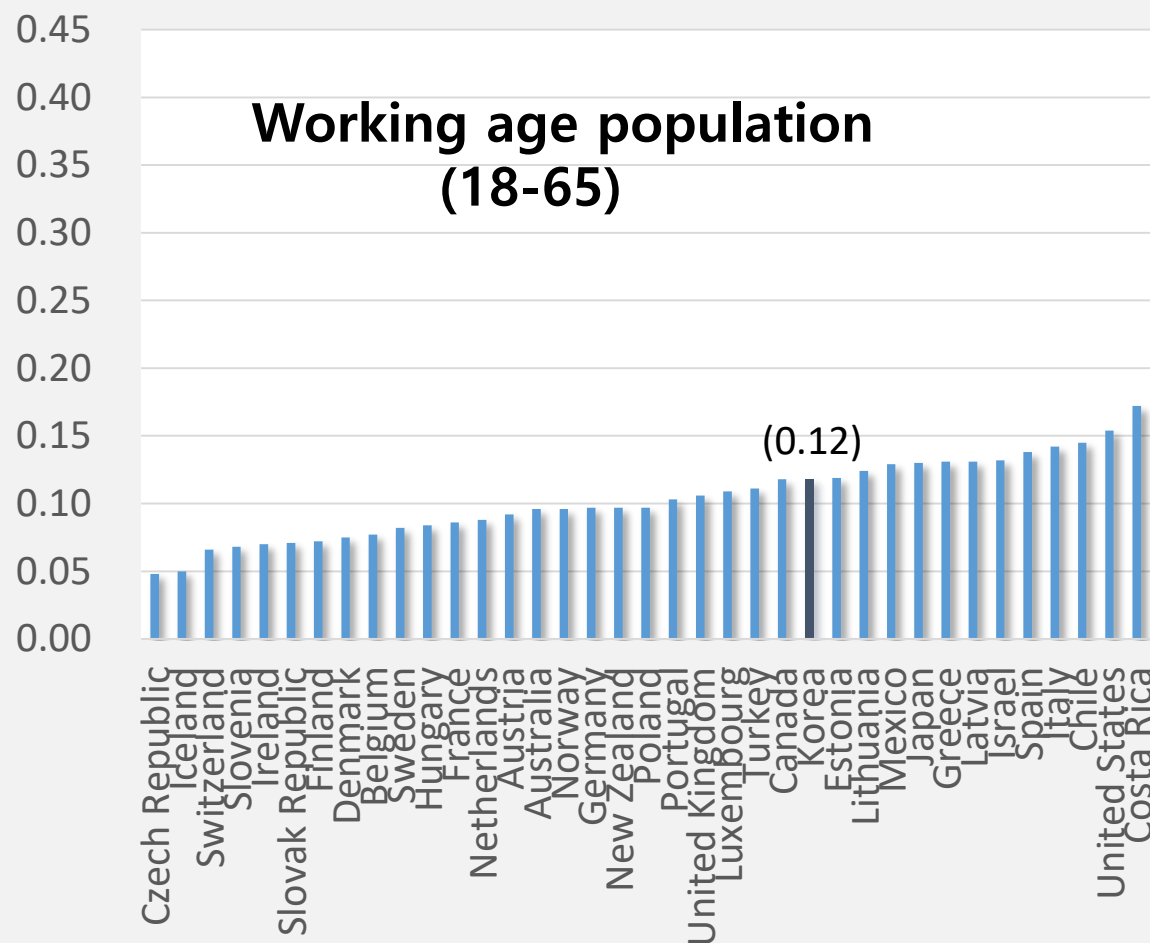
Relative poverty (disposable income, 2018 or the latest)



Source: OECD (<http://stats.oecd.org>).

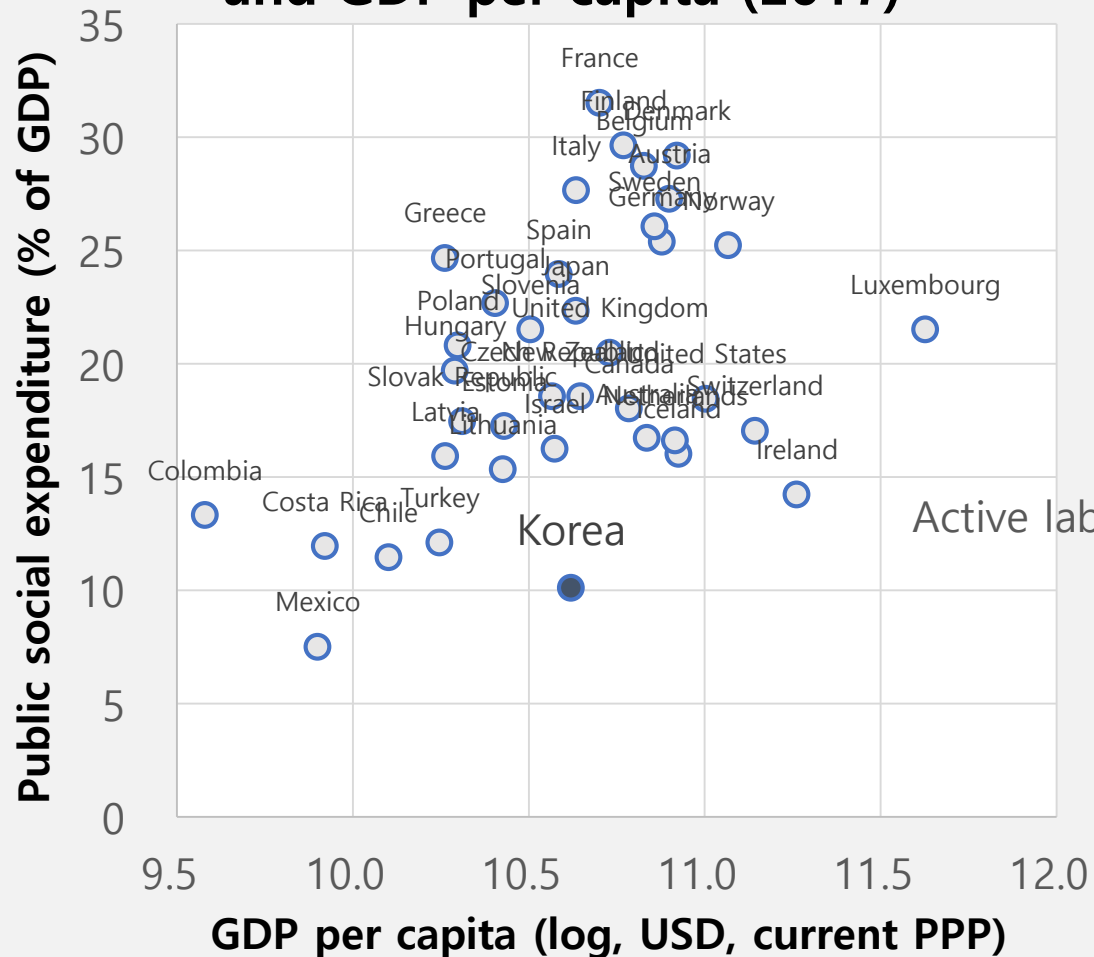
Poverty is concentrated in the elderly population.

Relative poverty (disposable income, 2018 or the latest)

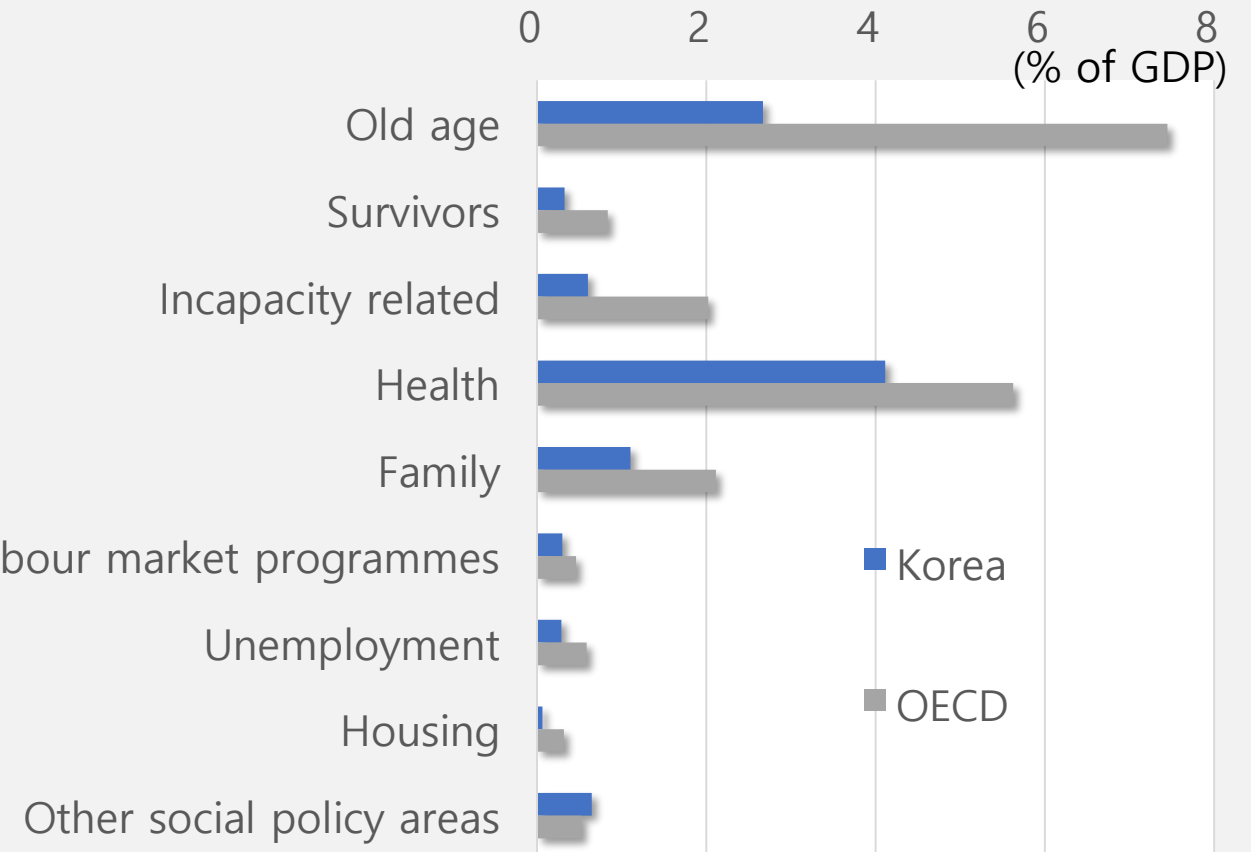


Reason (1): Weak income support to the elderly

**Public social expenditure
and GDP per capita (2017)**

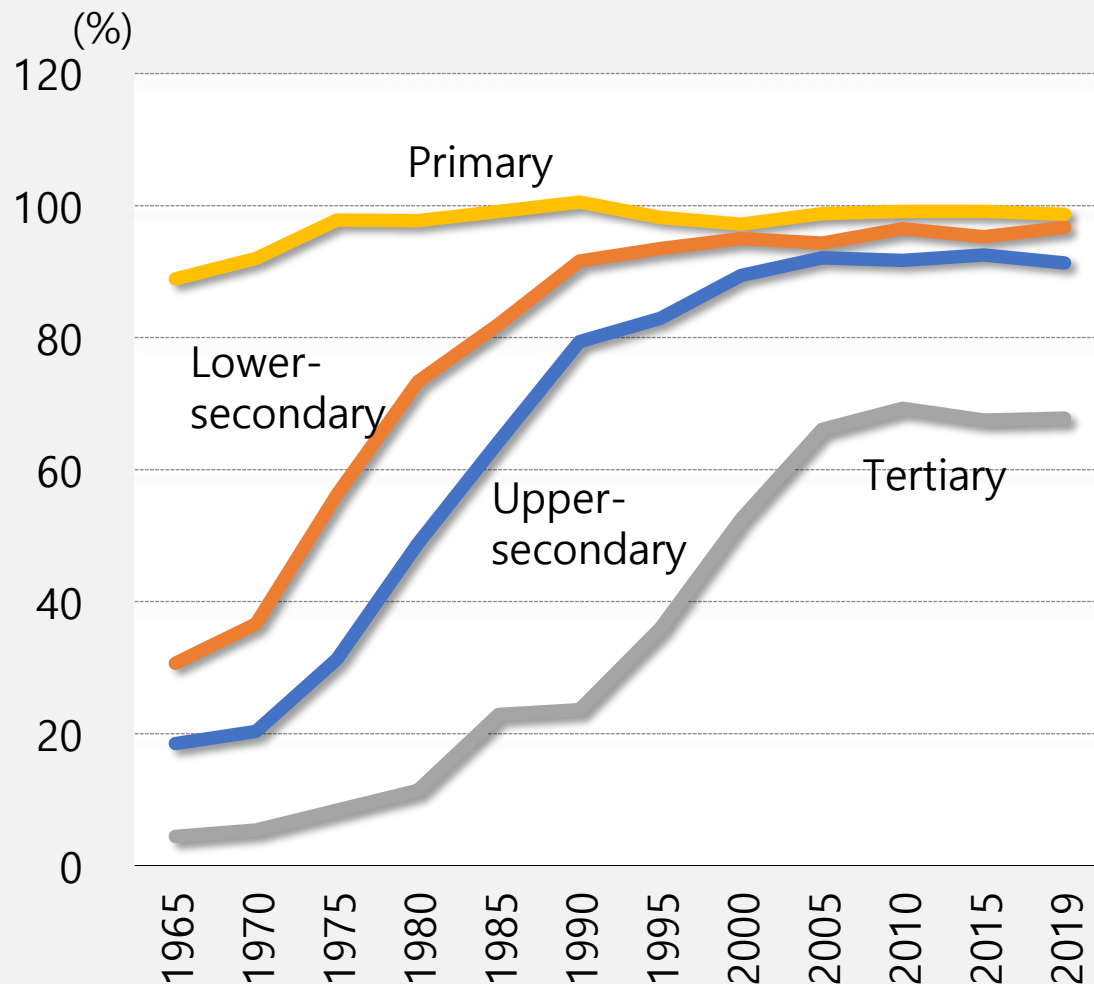


Public social expenditure (2017)



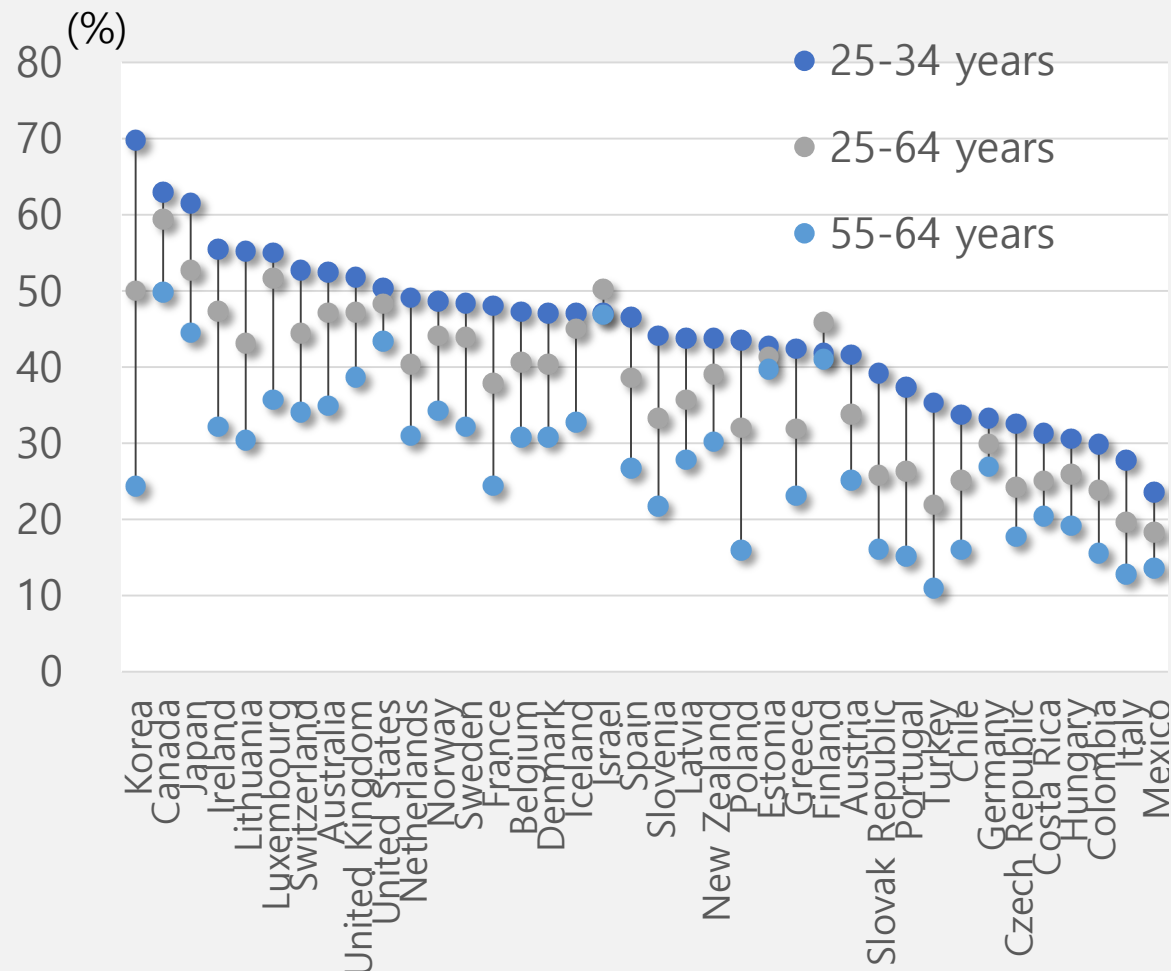
Reason (2): Low level of educational attainment

Enrollment rates (1965-2019)



Source: Ministry of Education & Korea Educational Development Institute.

Share of population with a college diploma




Source: OECD (<http://stats.oecd.org>).



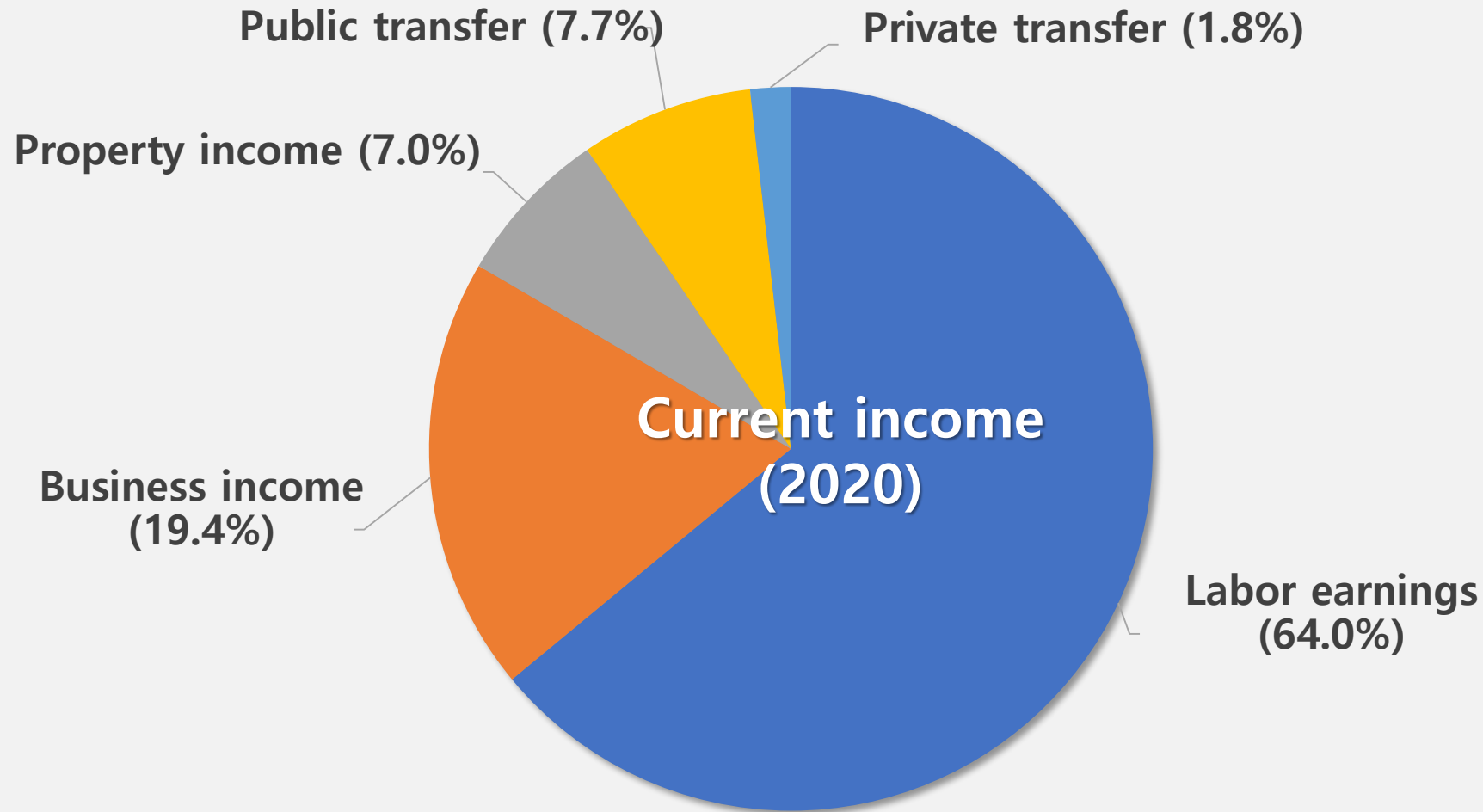
To summarize,

- ☐ Income inequality in Korea is mostly a question of **old age, low skill & insufficient public pensions.**
- ☐ A substantial and focused increase in **the income support to the vulnerable elderly population** is required.
- ☐ For the working-age population, a different sort of strategy is called for.



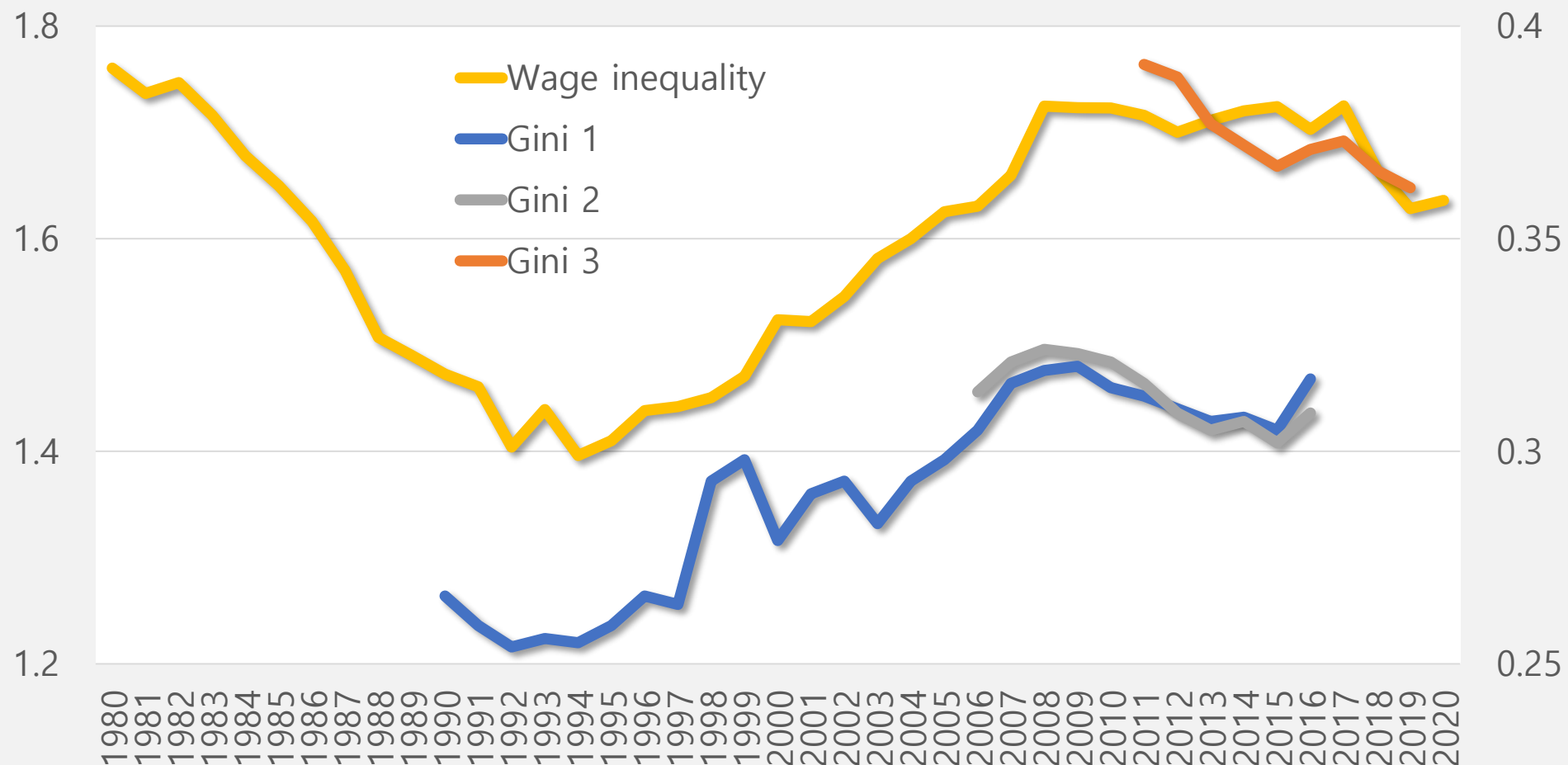
Income Inequality and Wage Inequality

Most of the household income comes from **labor earnings**.



Source: Statistics Korea (<http://kosis.kr>).

Income and wage inequalities are strongly correlated.



Note: Wage inequality: Q5-Q1 gap of log annual earnings of workers in establishments with ten or more workers.

Gini 1: Household Income and Expenditure Survey (urban households with two or more members, all ages, market income)

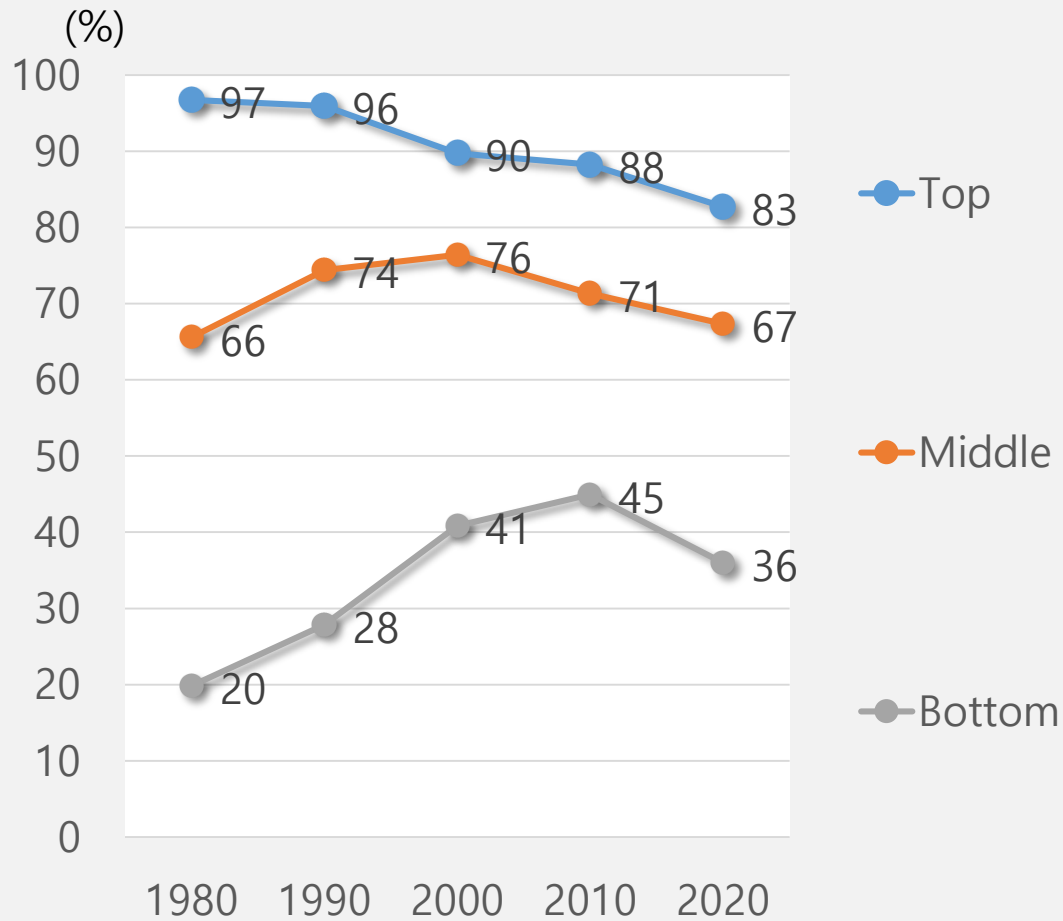
Gini 2: Household Income and Expenditure Survey (all households, ages 18-65 years, market income)

Gini 3: Household Finances and Living Conditions Survey (all households, ages 18-65 years, market income)

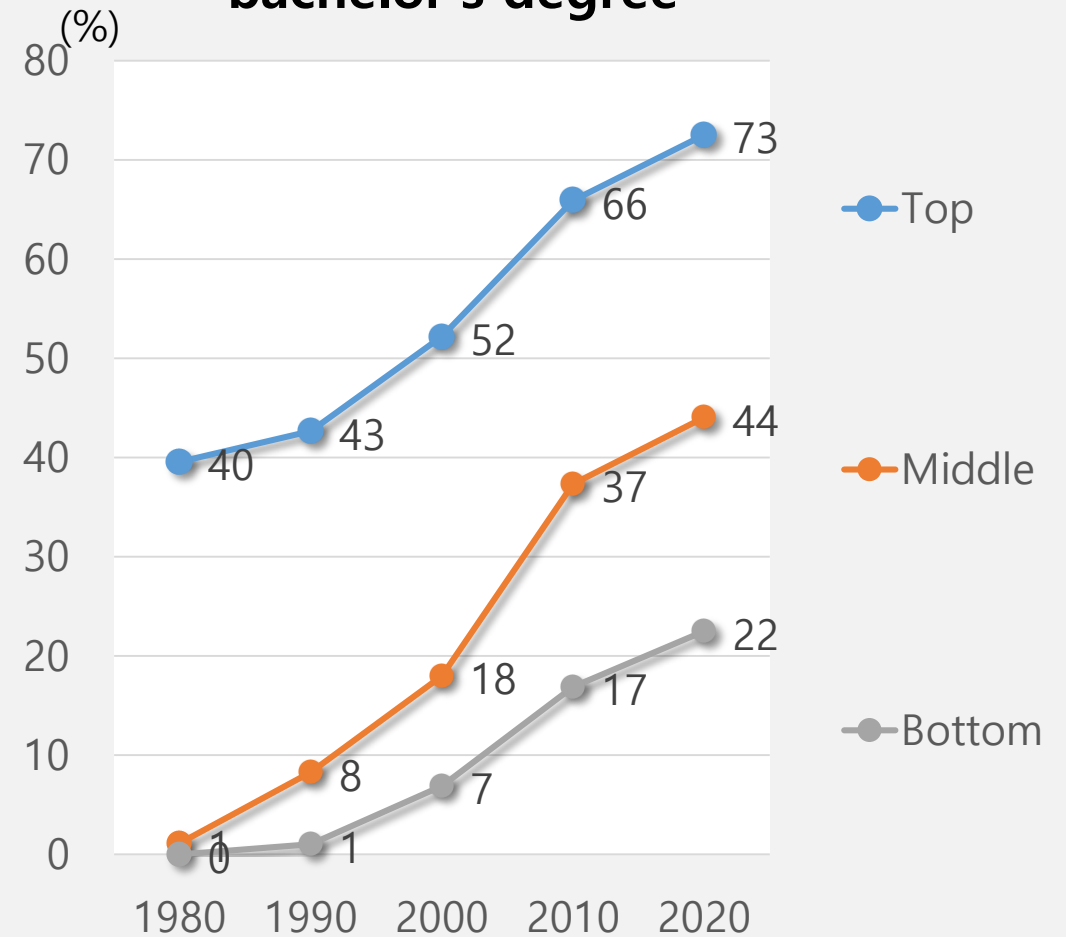
Source: Ministry of Employment and Labor, *Wage Structure Survey*, various years; Statistics Korea (<http://kosis.kr>).

Worker characteristics by wage quintile

Fraction of male workers



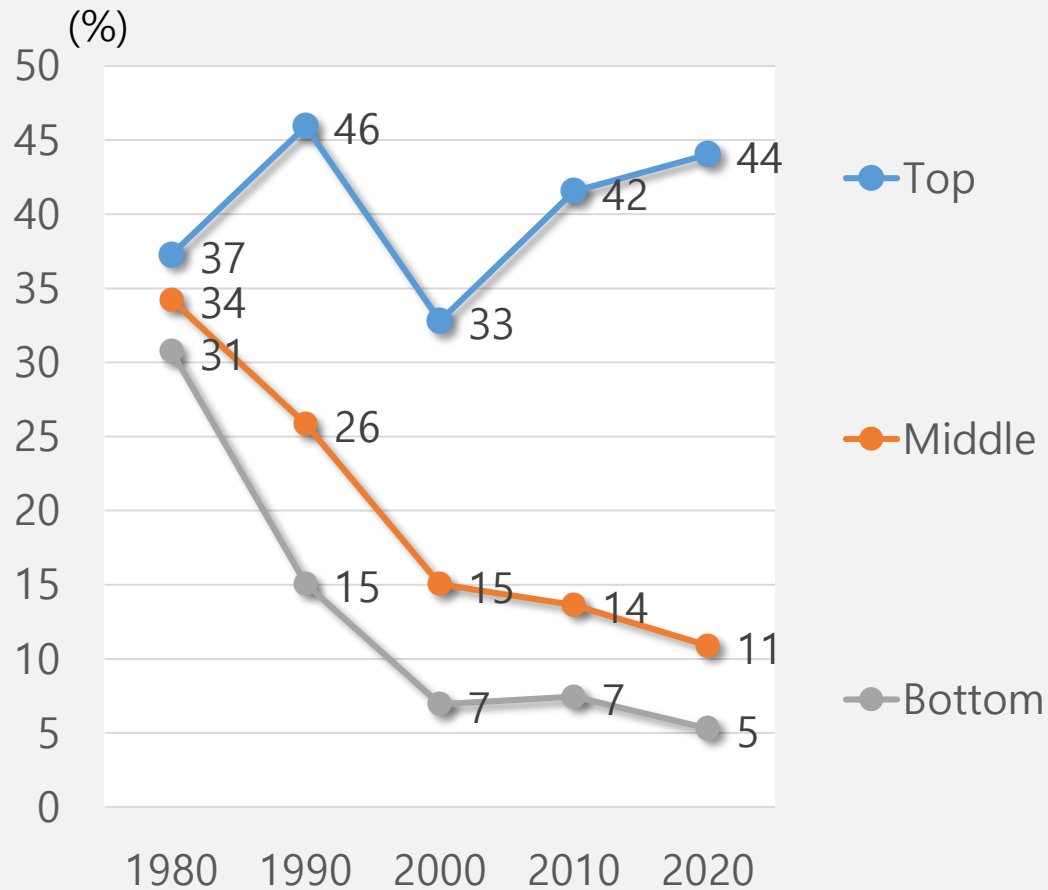
Fraction of workers with bachelor's degree



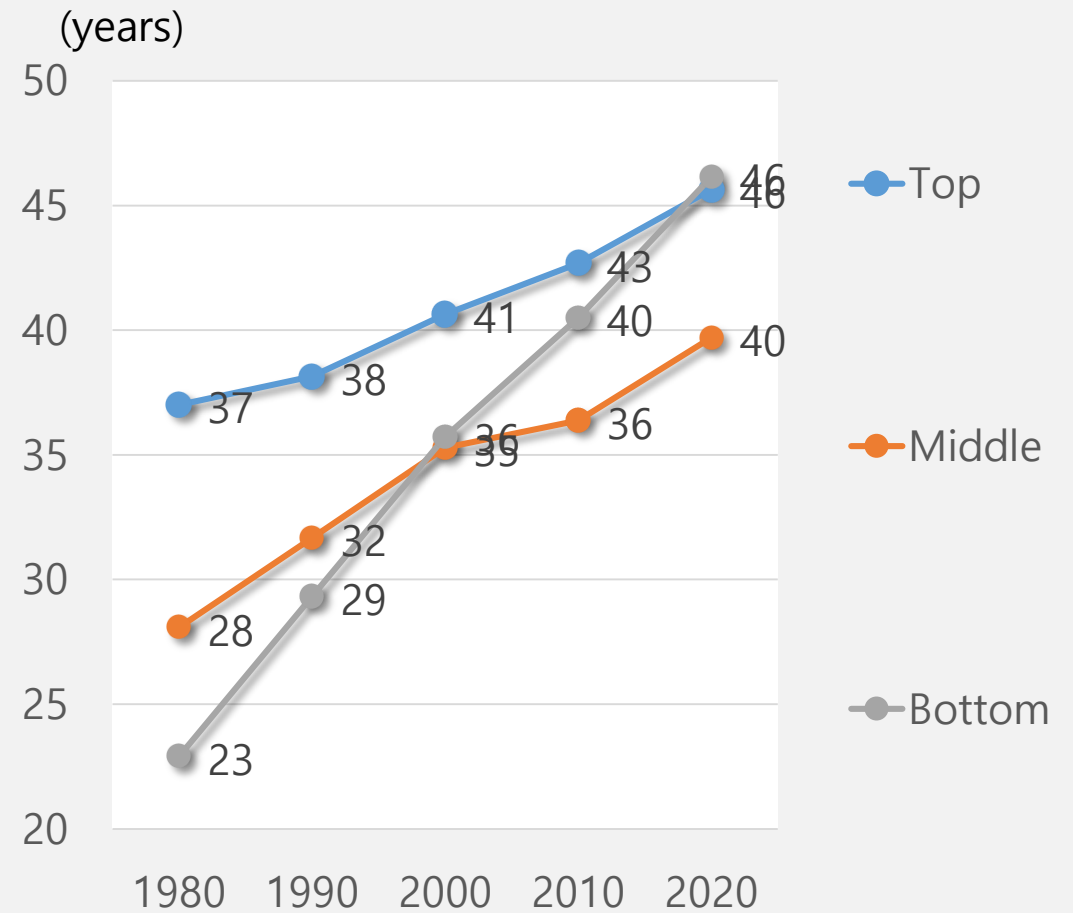
Source: Ministry of Employment and Labor, *Wage Structure Survey*, various years

Worker characteristics by wage quintile

Fraction of workers in establishments with 300 or more workers



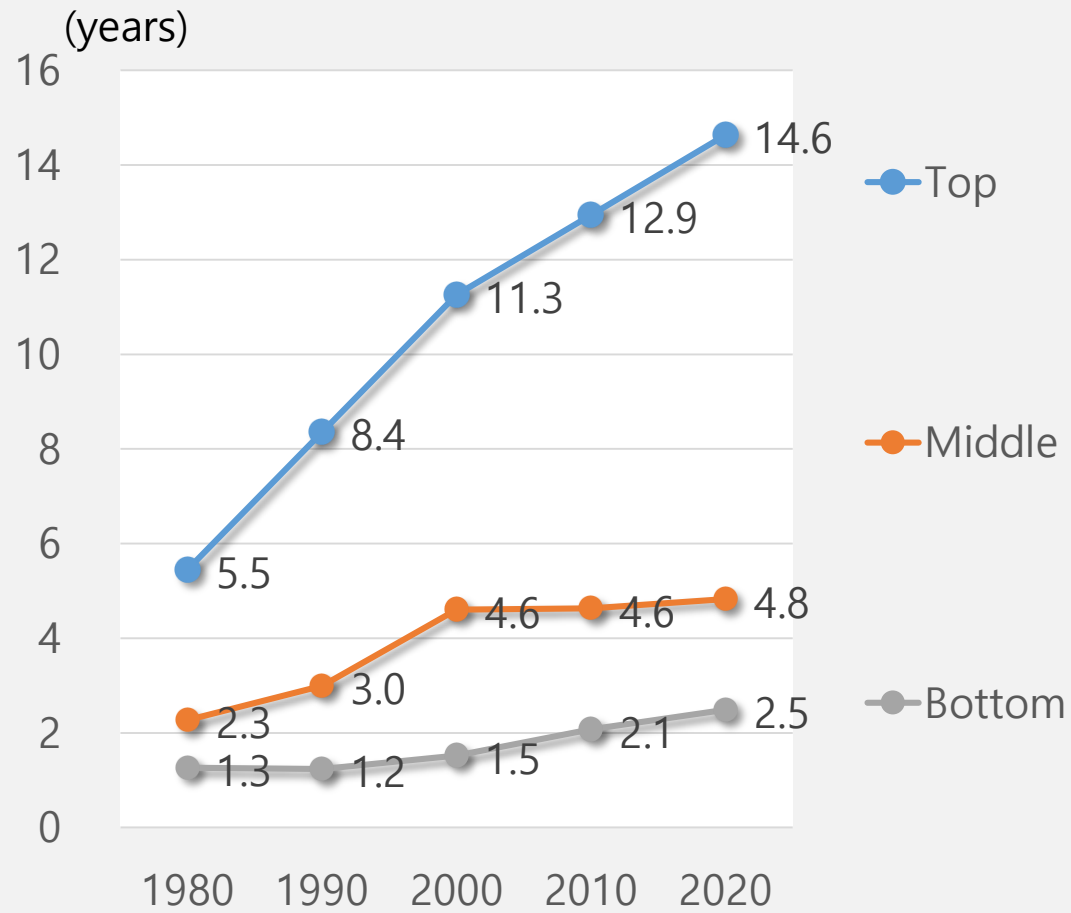
Average age



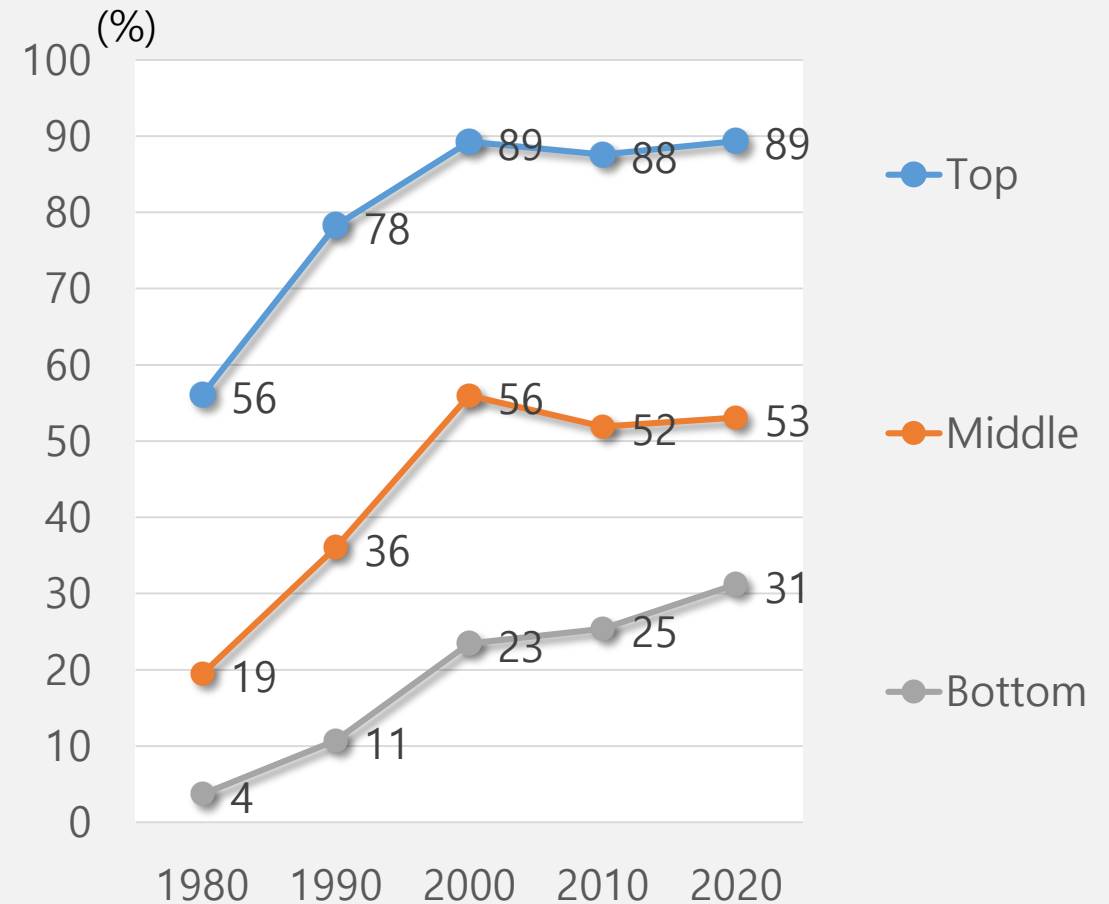
Source: Ministry of Employment and Labor, *Wage Structure Survey*, various years

Worker characteristics by wage quintile

Average tenure



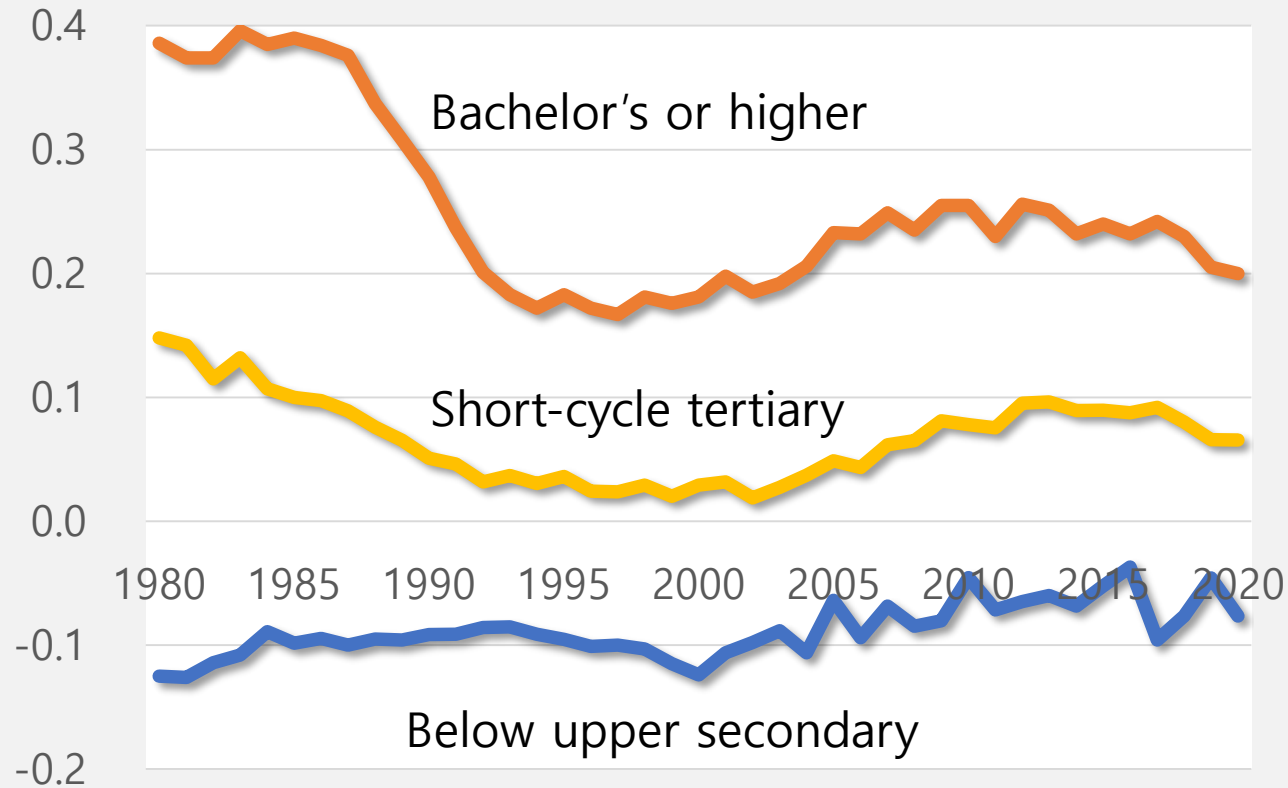
Fraction of workers with work experience of more than five years



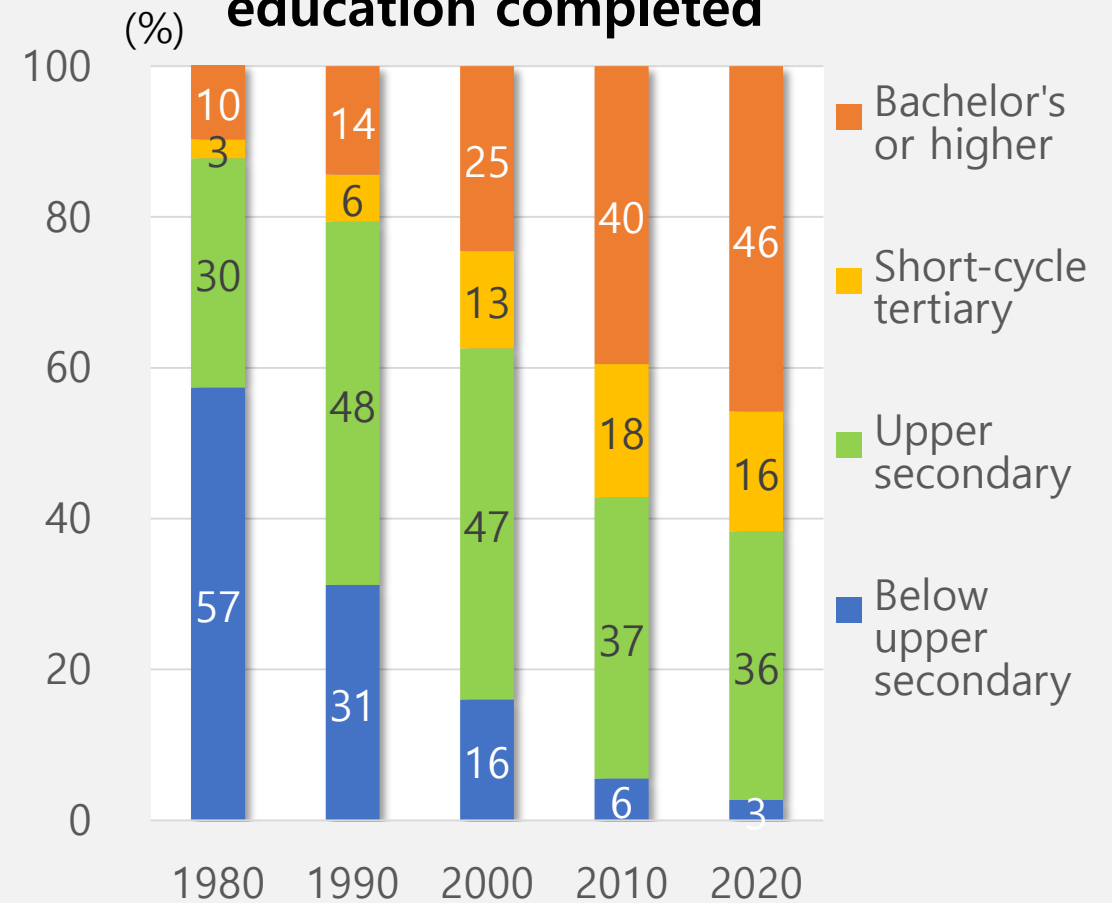
Source: Ministry of Employment and Labor, *Wage Structure Survey*, various years

Wage premium: Education

**Education premium
(against upper secondary education)**



Workers by the highest education completed



Note: Wage premiums were obtained from the estimation of Mincerian wage equations.

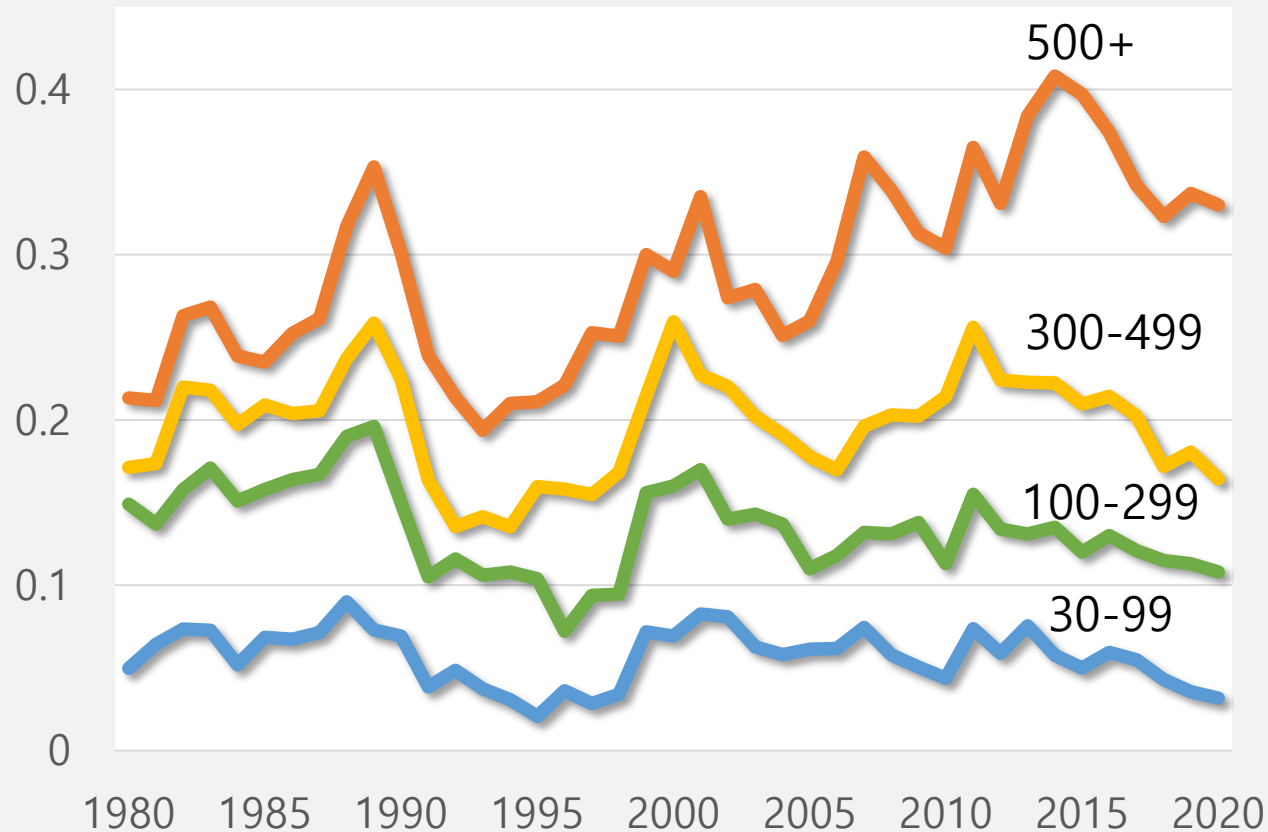
For more details, see Youngsun Koh, *The Evolution of Wage Inequality in Korea*, KDI, 2018.

See also 고영선, "임금격차는 어떻게, 왜 변해 왔는가?" KDI 정책포럼, 2019.

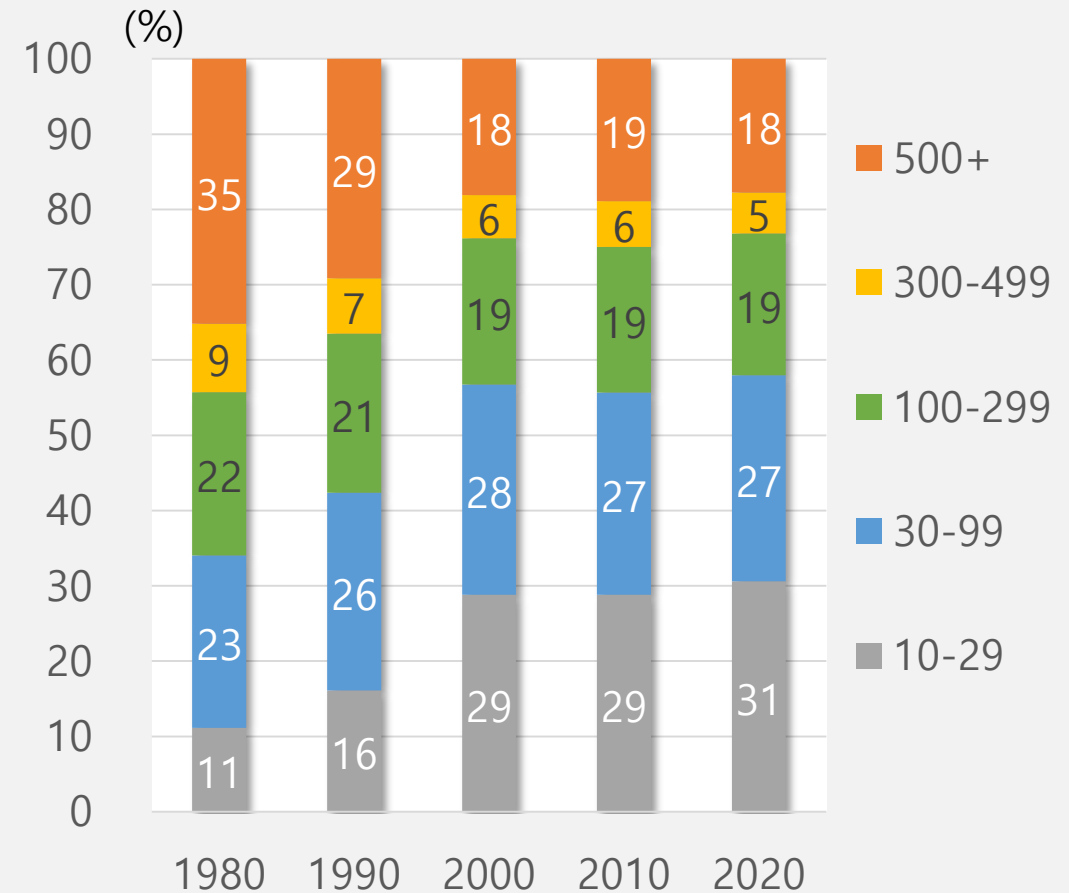
Source: Ministry of Employment and Labor, *Wage Structure Survey*, various years

Wage premium: Establishment size

**Establishment size premium
(against establishments with 10-29 workers)**



Workers by establishment size



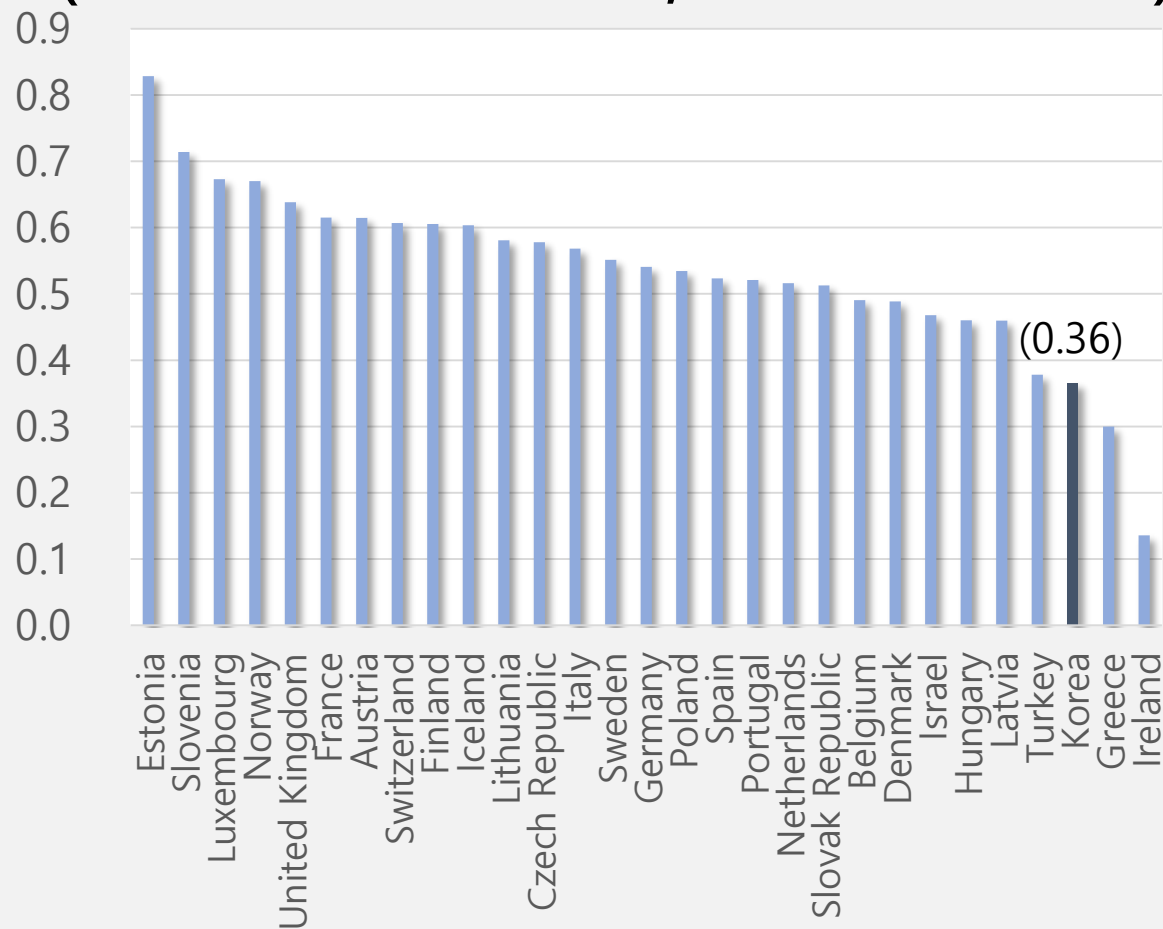
Note: Wage premiums were obtained from the estimation of Mincerian wage equations.

For more details, see Youngsun Koh, *The Evolution of Wage Inequality in Korea*, KDI, 2018.

Source: Ministry of Employment and Labor, *Wage Structure Survey*, various years

Larger firms exhibit much higher productivity.

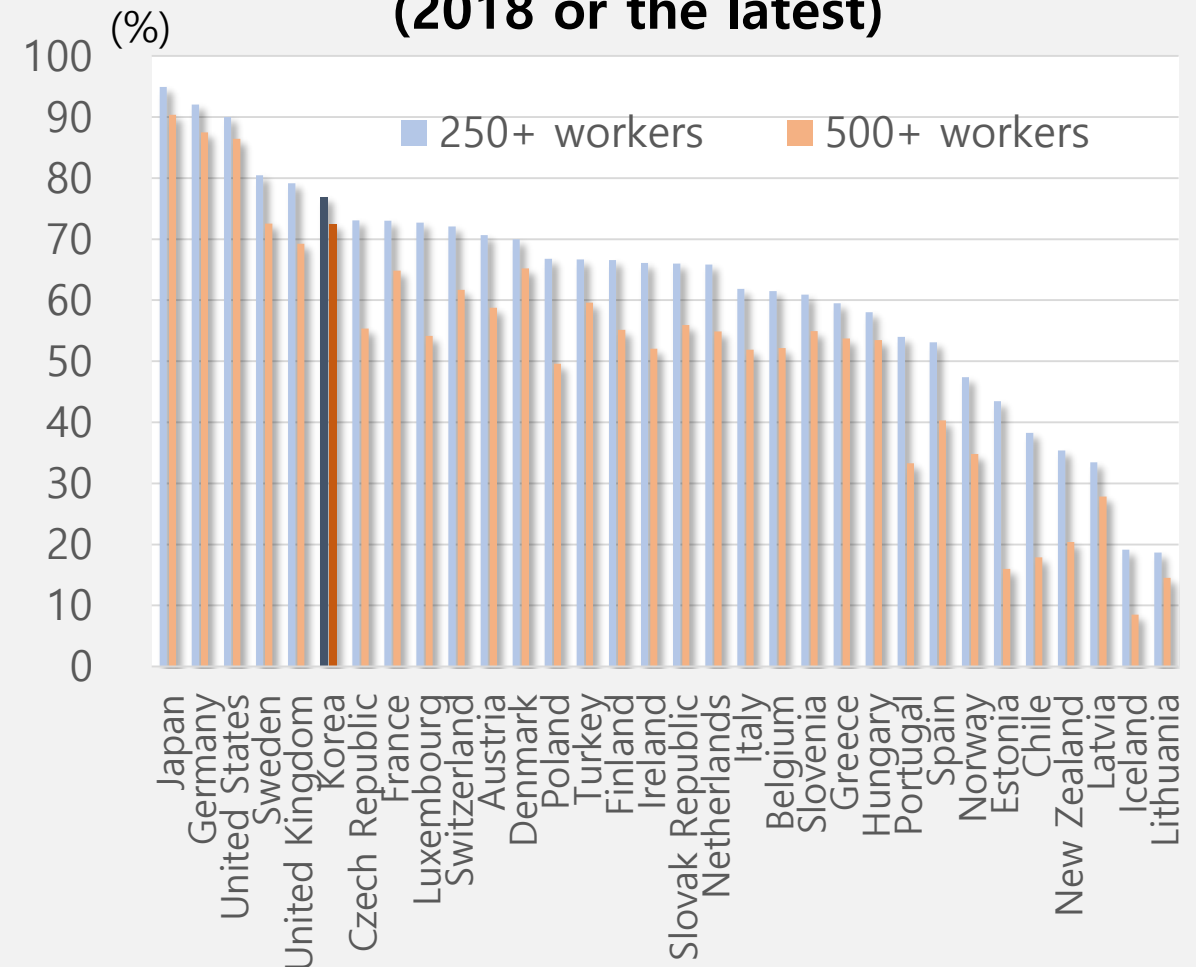
**Relative labor productivity
(1-249 to 250+ workers, 2018 or the latest)**



Note: Manufacturing.

Source: OECD, Structural and Demographic Business Statistics (ISIC Rev. 4).

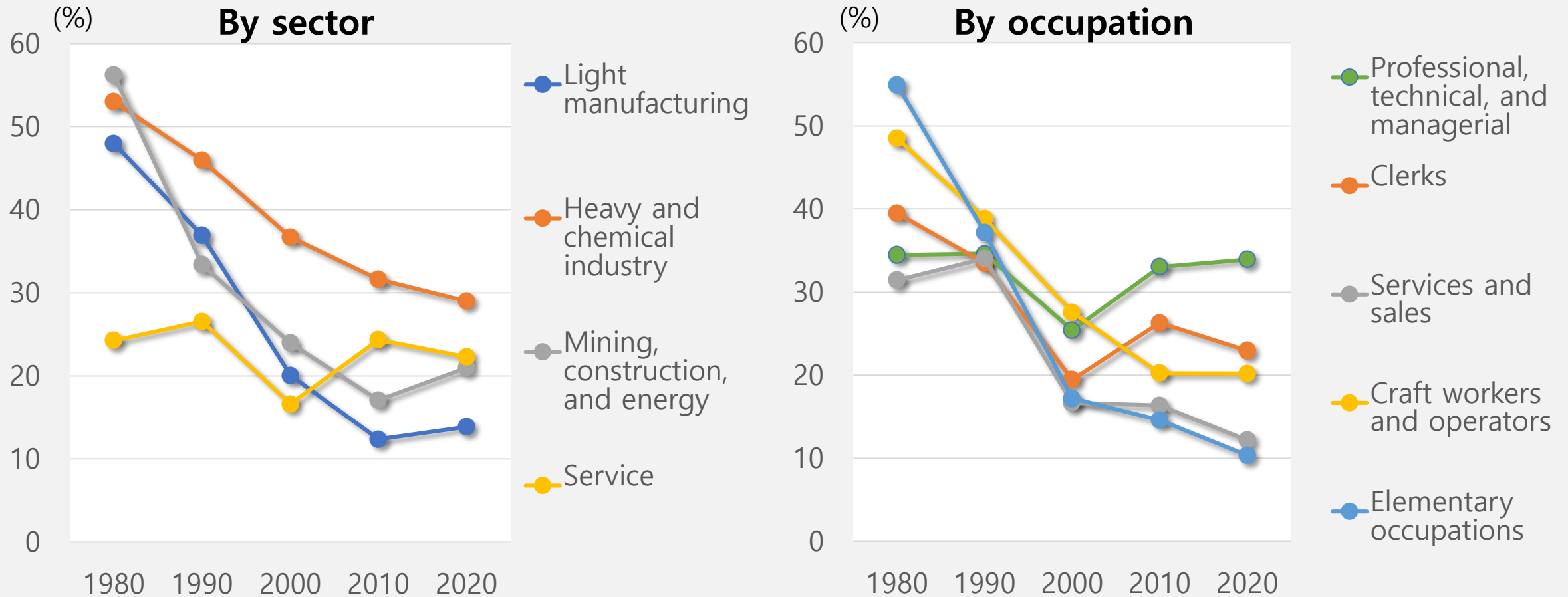
**Share in business R&D expenditure
(2018 or the latest)**



Source: OECD, Business enterprise R&D expenditure by source of funds and number of persons.

Firm size is associated with technology- and skill-intensity.

Share of workers in establishments with 300+ workers



Source: Ministry of Employment and Labor, *Wage Structure Survey*, various years

Of particular concern are the **traditional services** that exhibit very low productivity but account for a large part of employment.

Employment share and labor productivity by sector (2018)

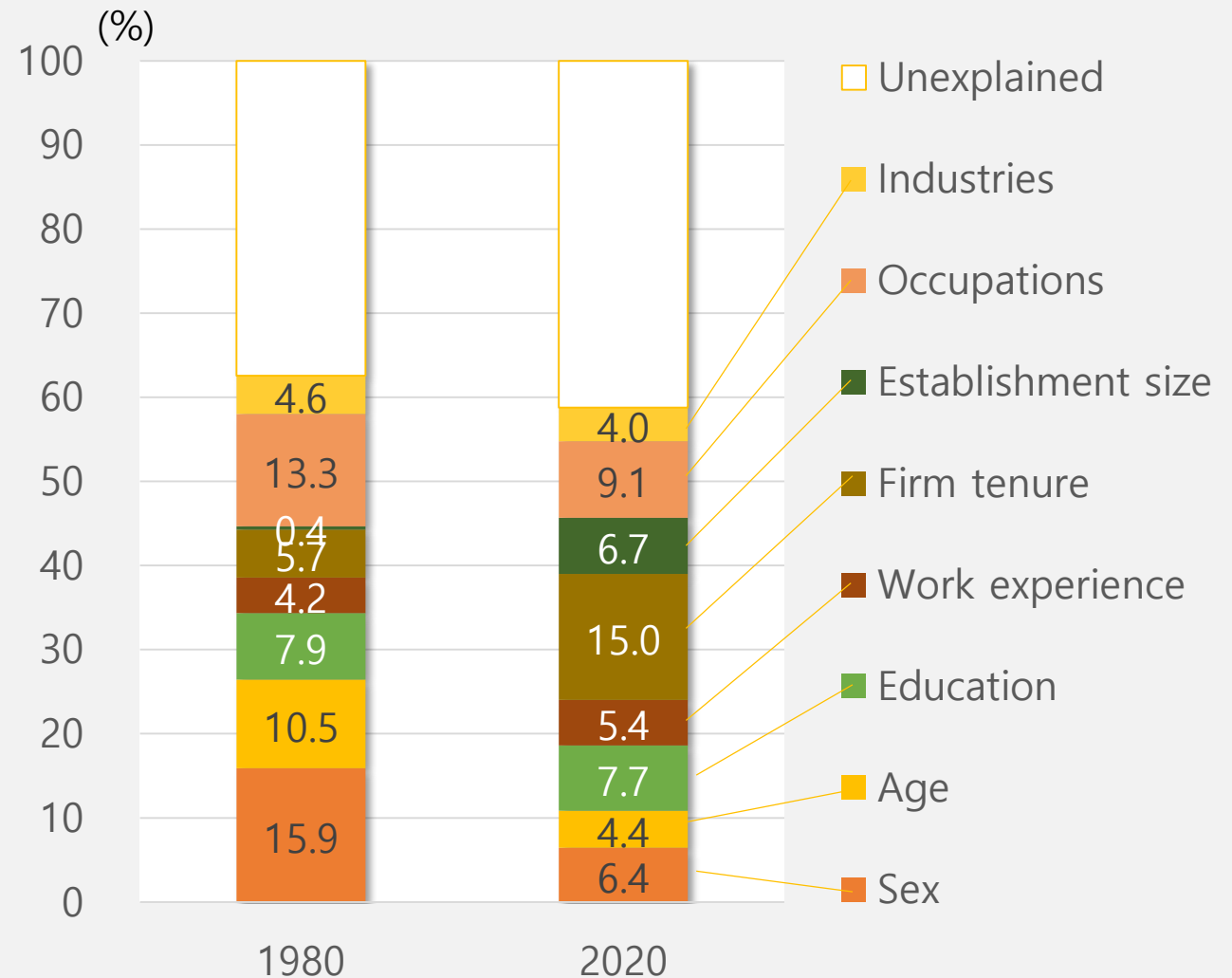
Sector	Employment (%)	Labor productivity (million KRW)	
Agriculture	5.0	25	(0.4)
Mining, construction, and energy	8.4	341	(5.3)
Manufacturing	16.8	112	(1.7)
Services excluding traditional services	41.1	76	(1.2)
Wholesale and retail trade	13.9	29	37 (0.6)
Accommodation and food service	8.4		20 (0.3)
Other services	6.5		24 (0.4)
Total	100.0	65	(1.0)

(Note: The three service sectors (Wholesale and retail trade, Accommodation and food service, and Other services) are grouped together with a bracket indicating a combined productivity of 29 million KRW and an average of (0.4).)

Source: OECD STAN Industrial Analysis.

Firm tenure, education, and establishment size are currently the three most important determinants of wage inequality.

Decomposition of the wage gap (Q5-Q1)



Note: For the methodology of decomposition, see Youngsun Koh, *The Evolution of Wage Inequality in Korea*, KDI, 2018.

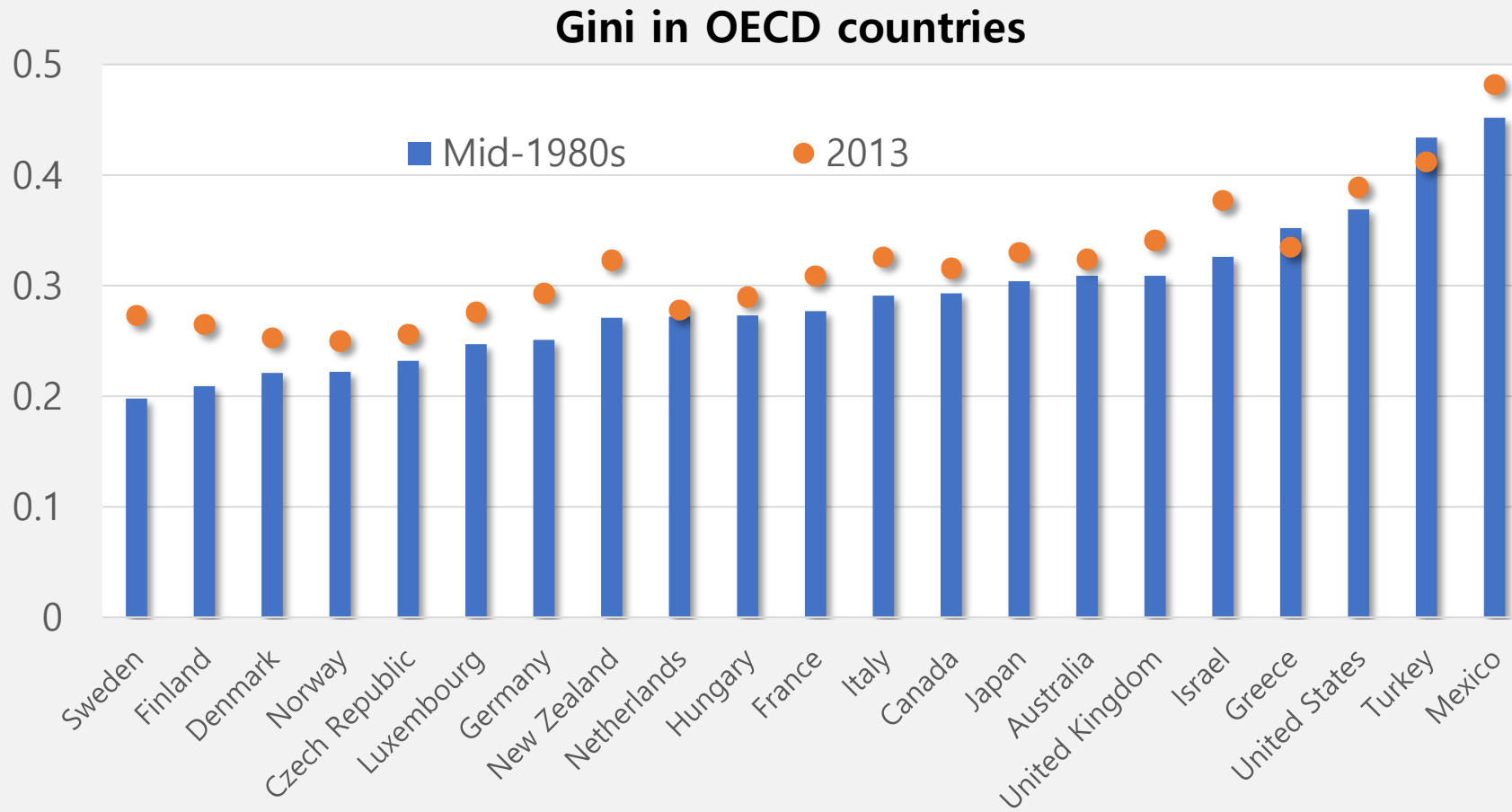
Source: Ministry of Employment and Labor, *Wage Structure Survey*, various years

To summarize,

- ☐ **Workers at the bottom wage quintile tend to be low-skilled and old, and suffer from job insecurity.**
 - The best way to help them would be to **relax labor market regulations and to increase in-work benefits** (*e.g.*, earned income tax credits).
- ☐ **Education is an important determinant of wage inequality.**
 - Reforms at all levels of education (primary, secondary & tertiary) are needed to reduce the education premium.
- ☐ **The gap is substantial between large firms that offer long-term career building chances to their workers and others that do not.**
 - It is critical to **encourage scaling-up of firms**, which necessarily entails the exits of uncompetitive firms (“up-or-out”).

Changing Circumstances

Since the 1980s, almost all countries have experienced worsening income distribution.



Source: OECD (<http://stats.oecd.org>).

This is attributed in large part to

① Technological progress

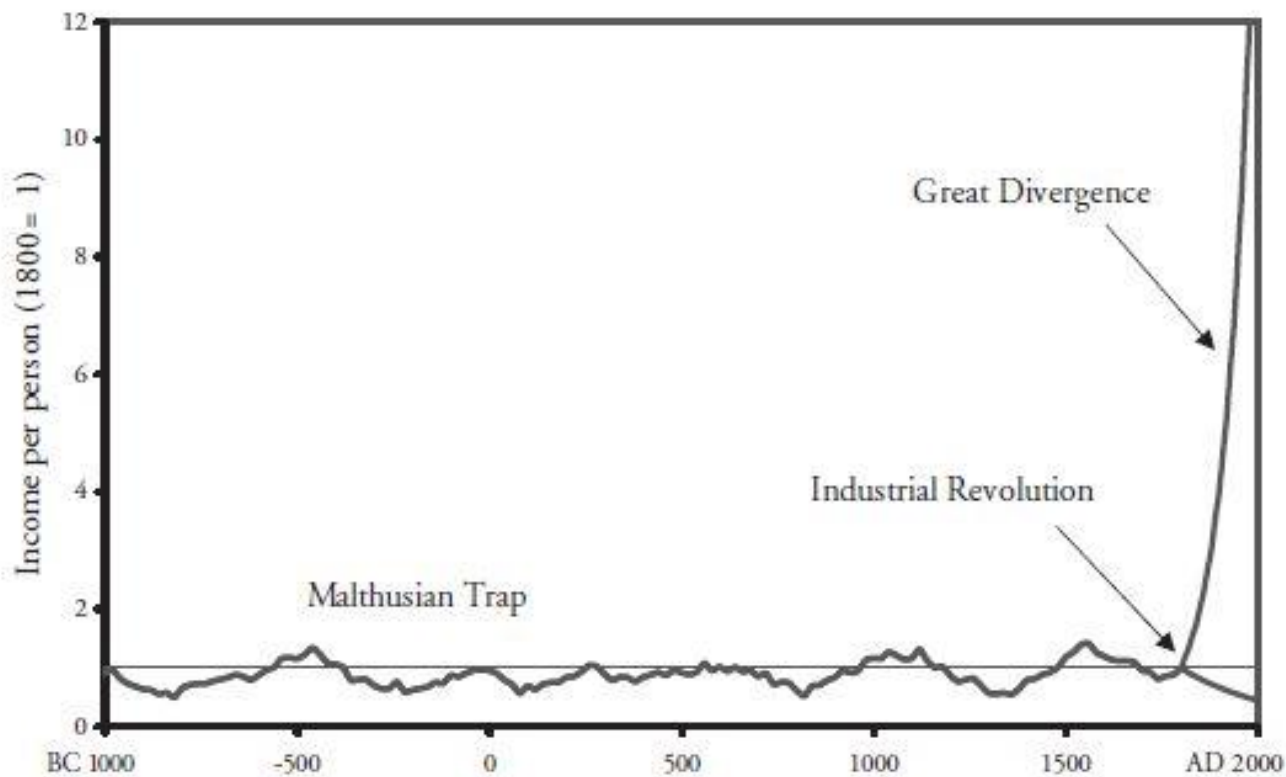


Figure 1.1 World economic history in one picture. Incomes rose sharply in many countries after 1800 but declined in others.

4.0

4th revolution

Cyber physical systems



3.0

3rd revolution

Electronic and IT systems, automation



2.0

2nd revolution

Mass production and electricity



1.0

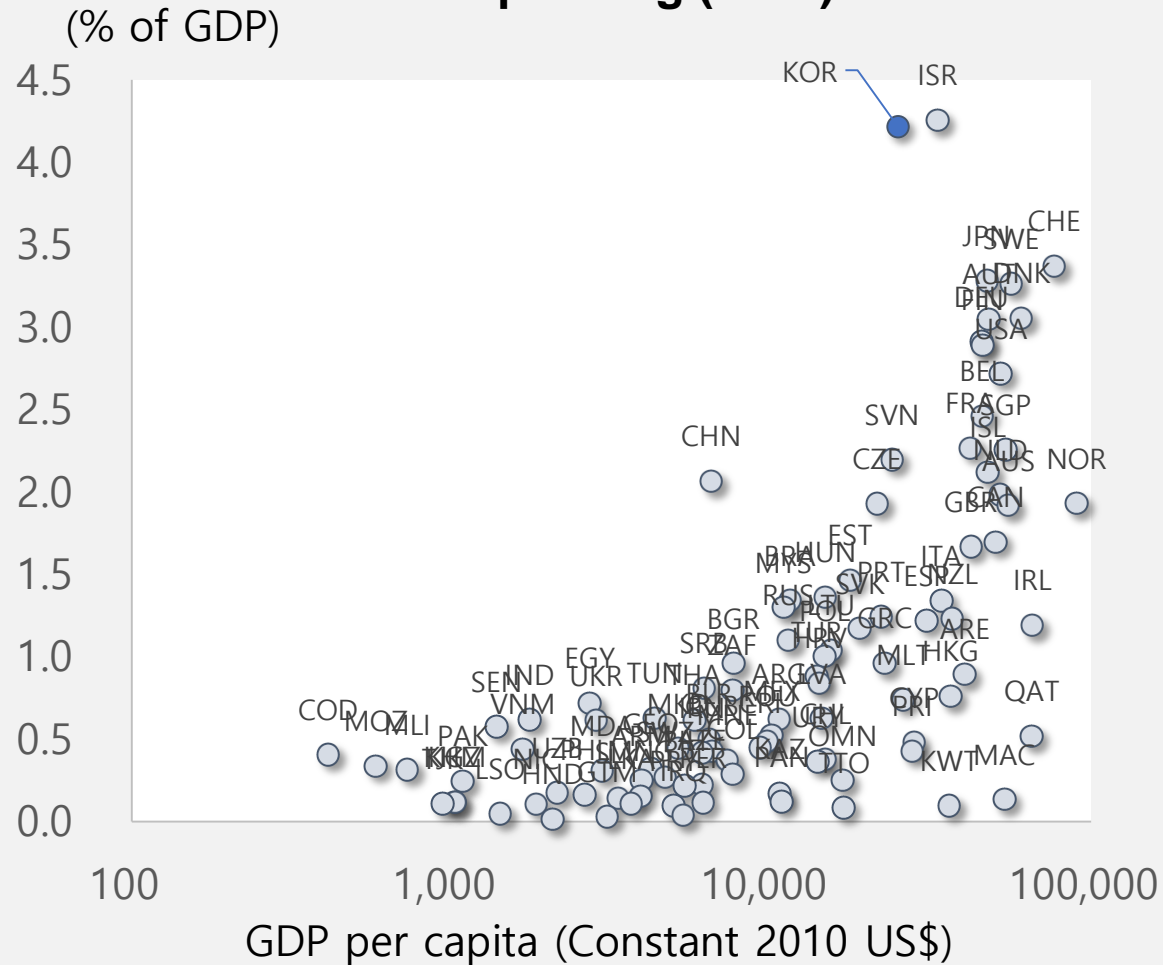
1st revolution

Mechanization, steam and water power



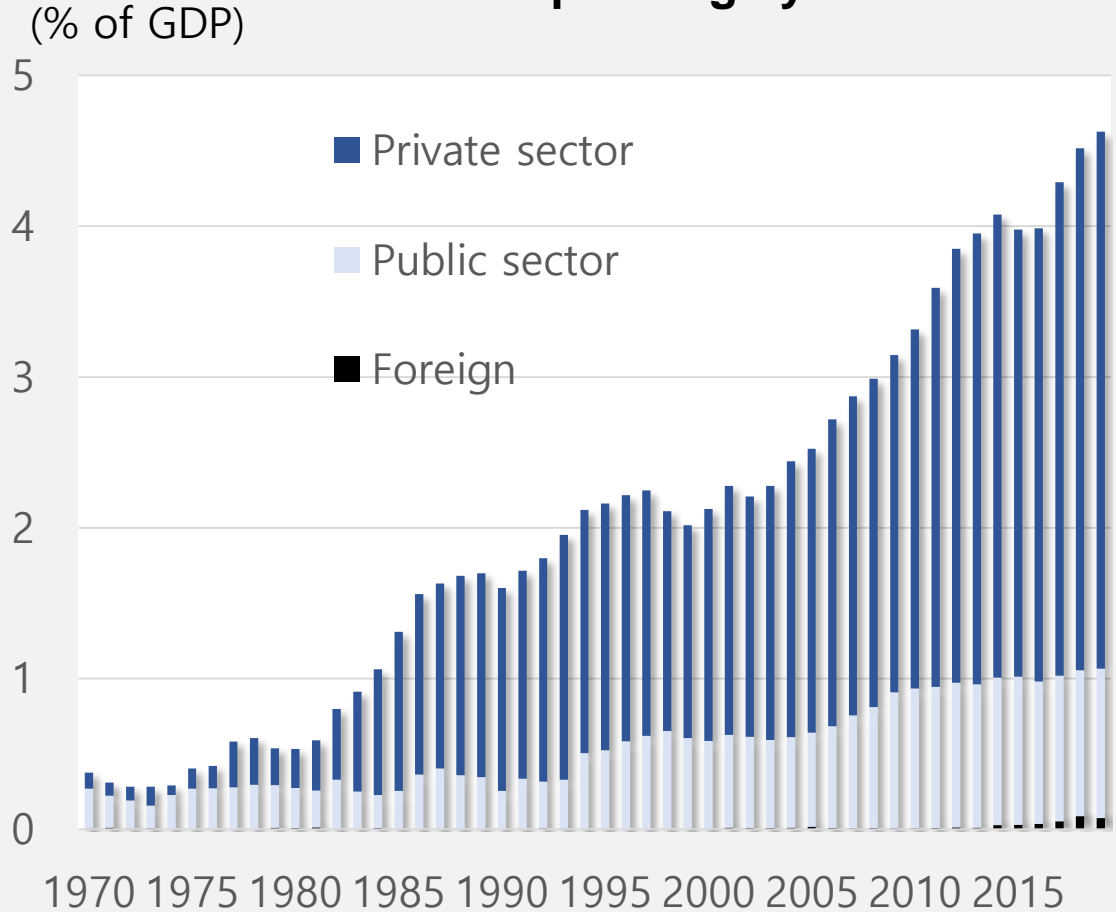
Korean firms are investing heavily in innovation.

R&D spending (2015)



Source: World Bank, World Development Indicators.

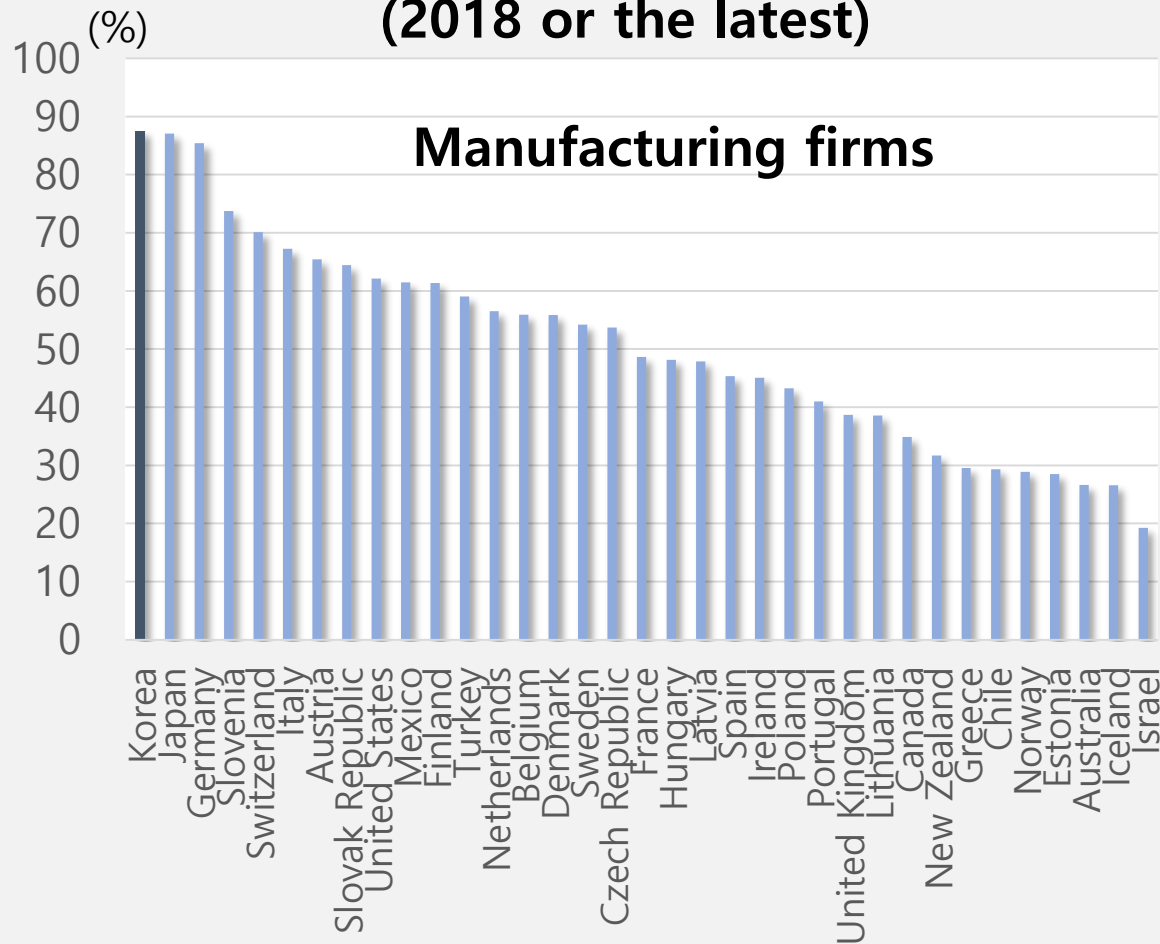
Korea's R&D spending by source



Source: Statistics Korea (<http://kosis.kr>).

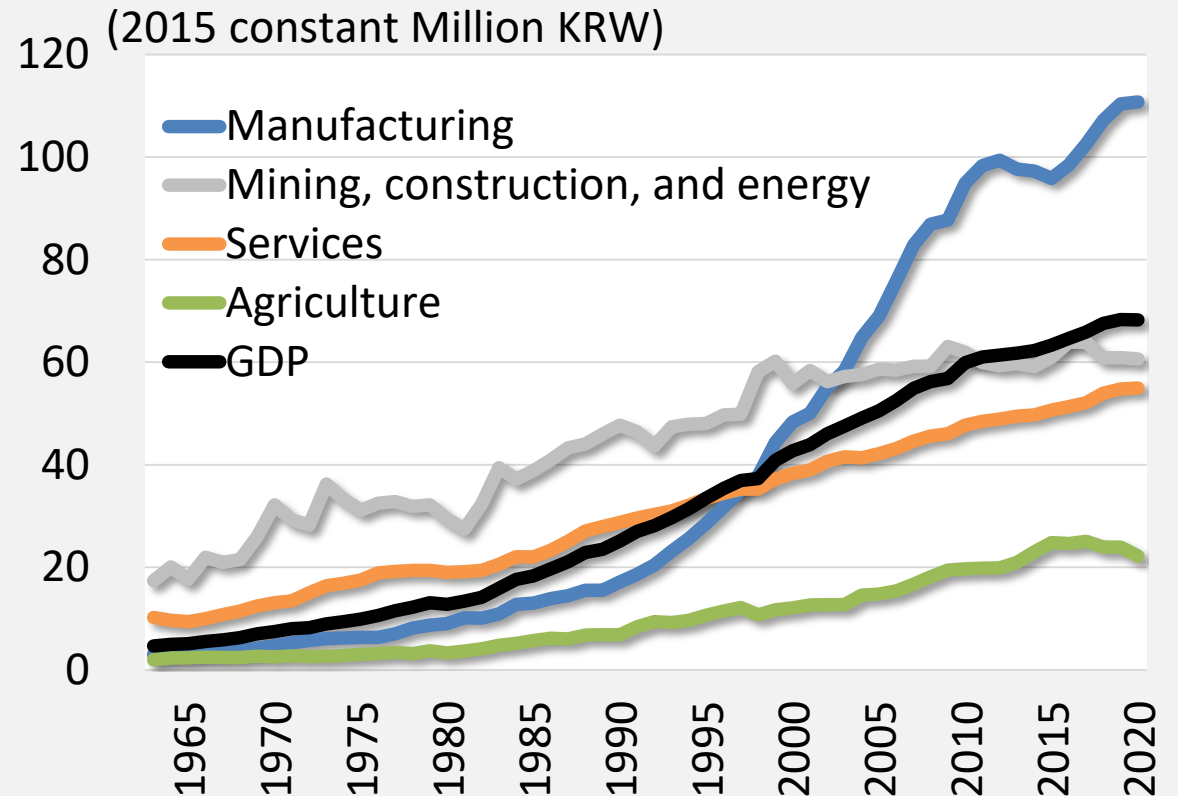
These efforts are led by large firms in manufacturing, increasing the productivity gap and wage inequality.

**Share in business R&D expenditure
(2018 or the latest)**



Source: OECD, Business enterprise R&D expenditure by source of funds and number of persons.

Labor productivity by sector



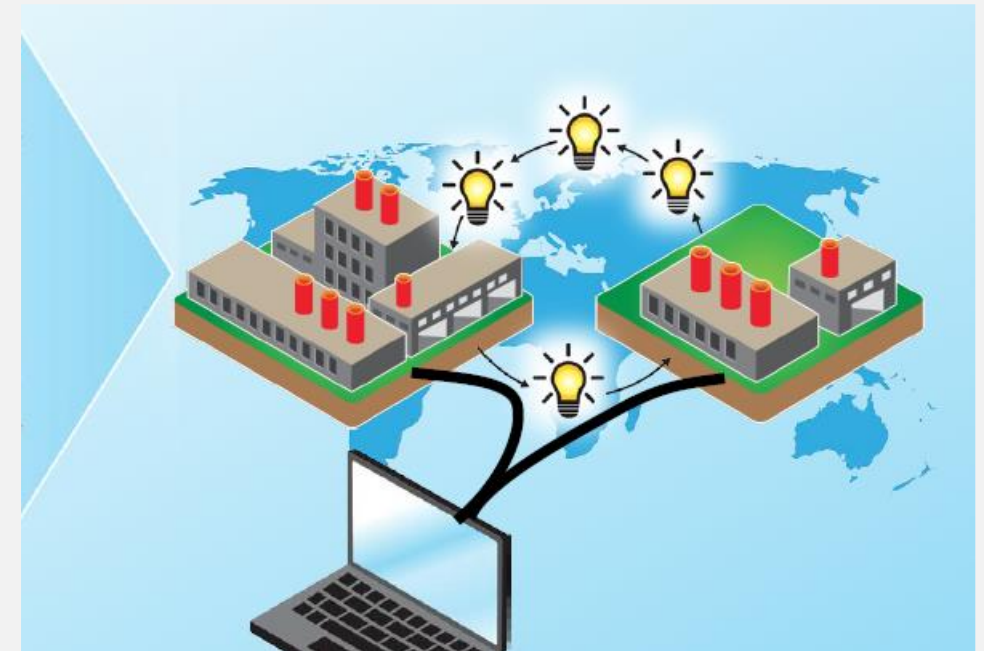
Source: Bank of Korea (<http://ecos.bok.or.kr>); Statistics Korea (<http://kosis.kr>).

② Globalization

- Two rounds of “unbundling”
 - The first (around 1820): Lower trade costs

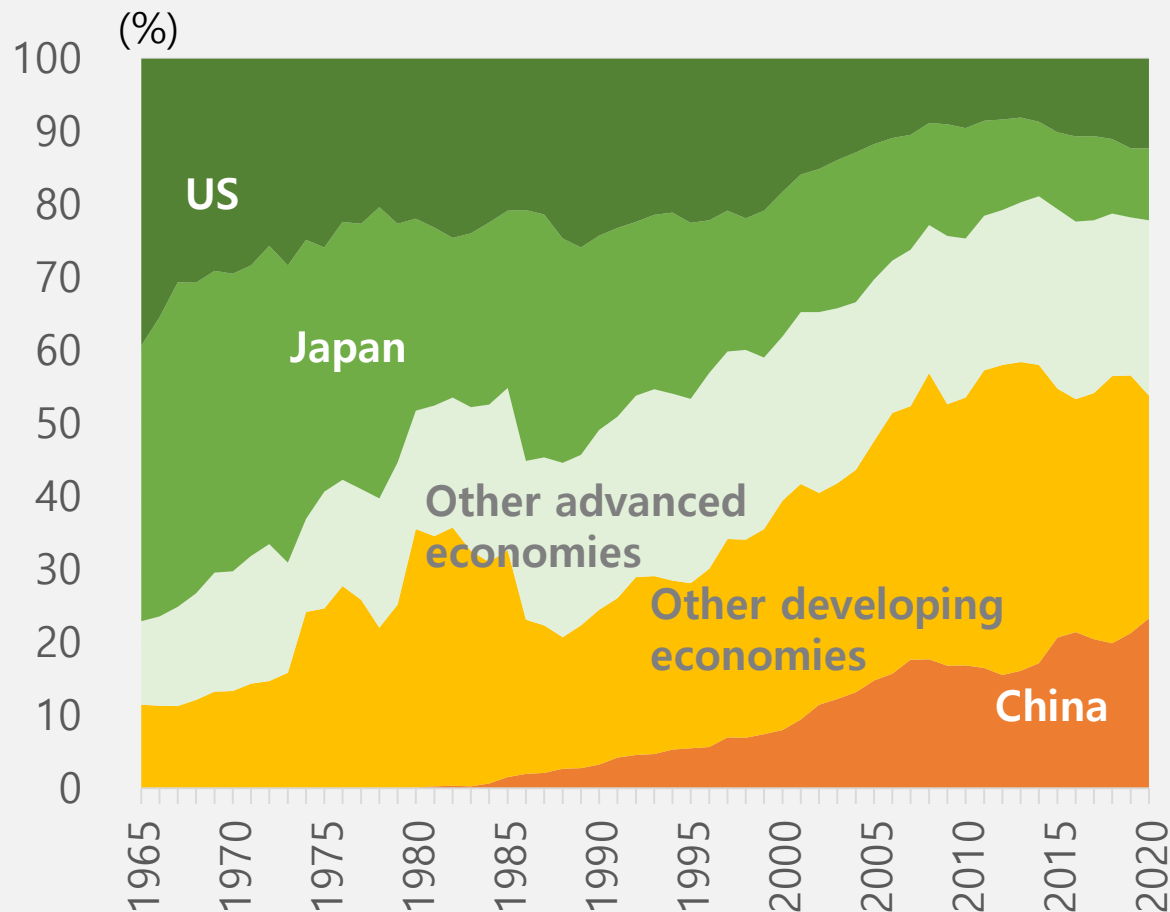


- The second (around 1990):
ICT revolution



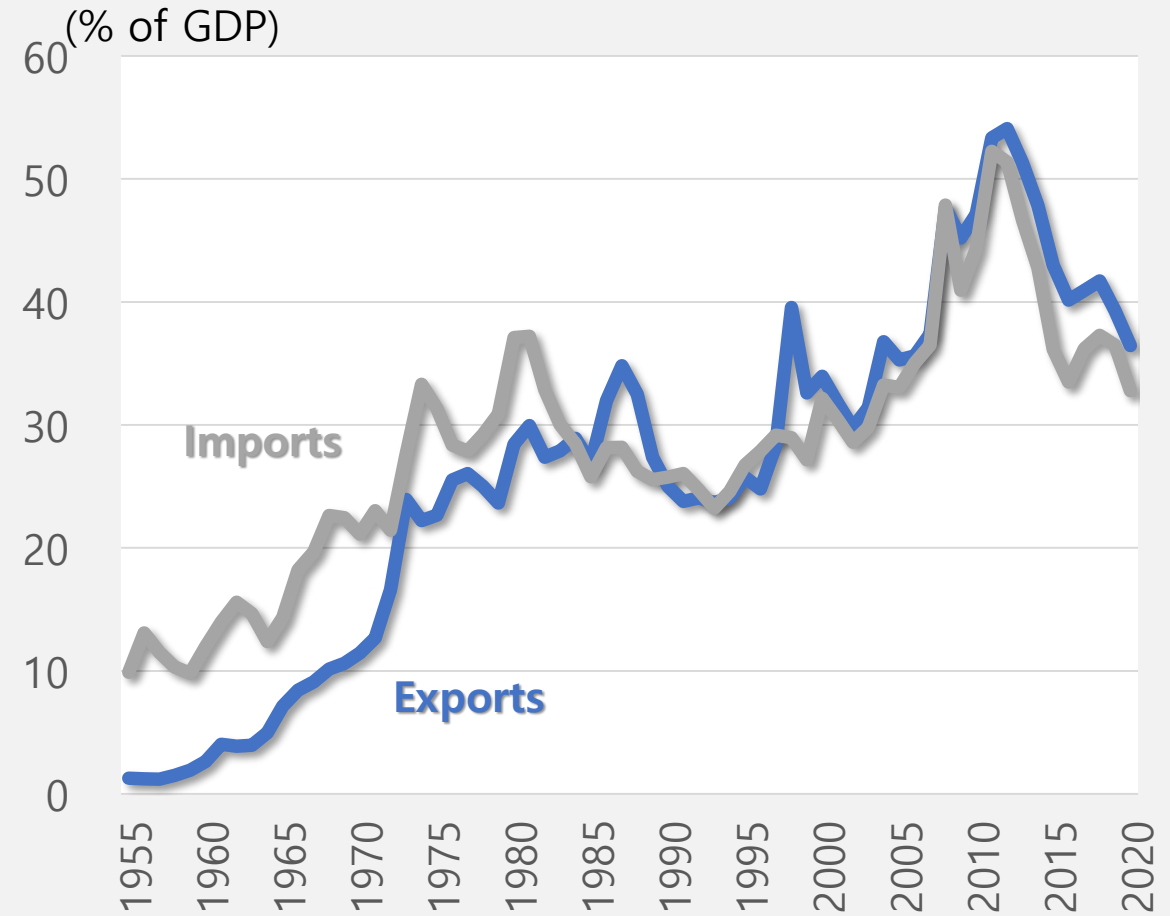
Globalization appears another important factor behind increasing inequality in Korea.

Korea's Imports by Country



Source: Statistics Korea (<http://kosis.kr>).

Korea's imports and exports

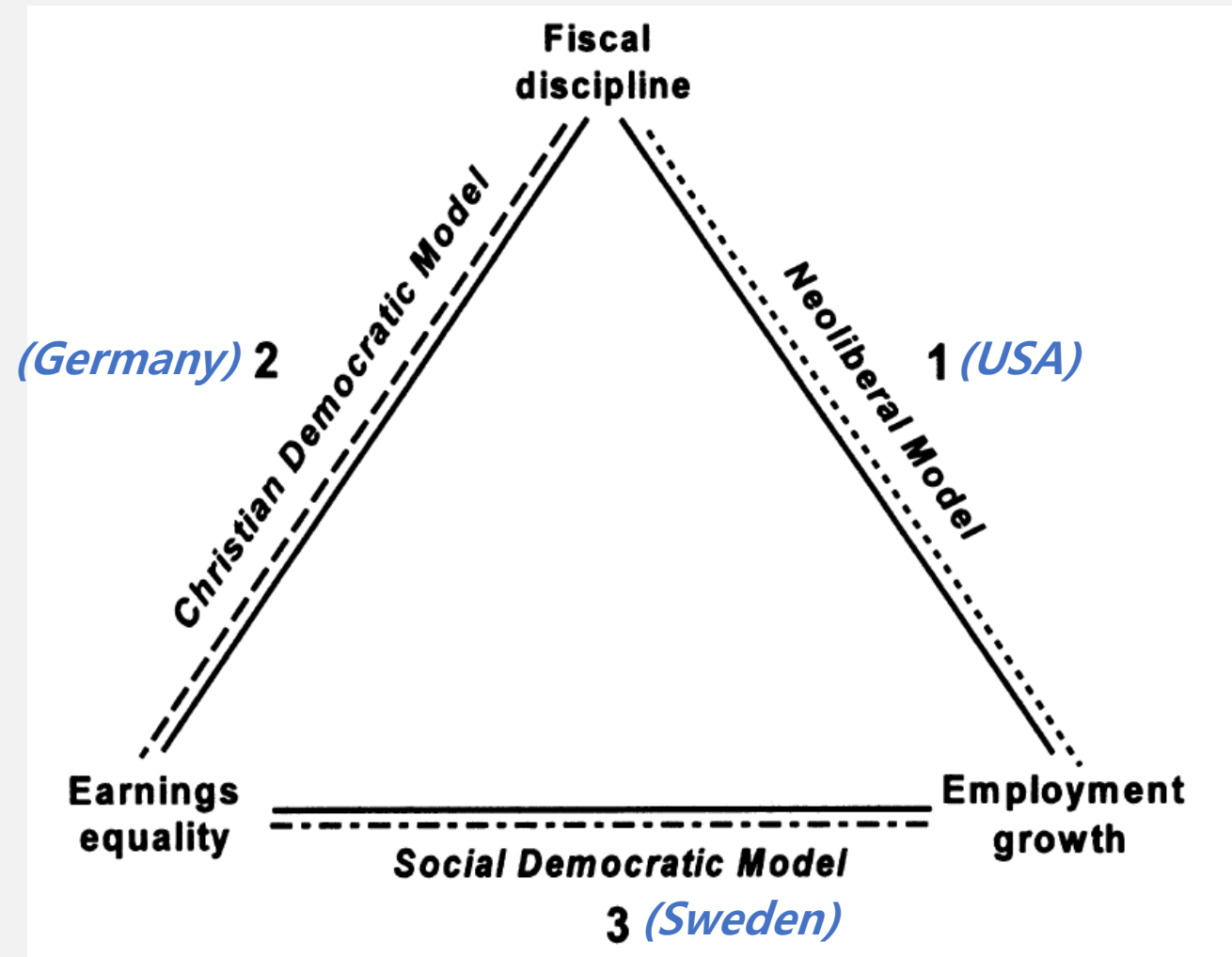


Source: Bank of Korea (<http://ecos.bok.or.kr>).



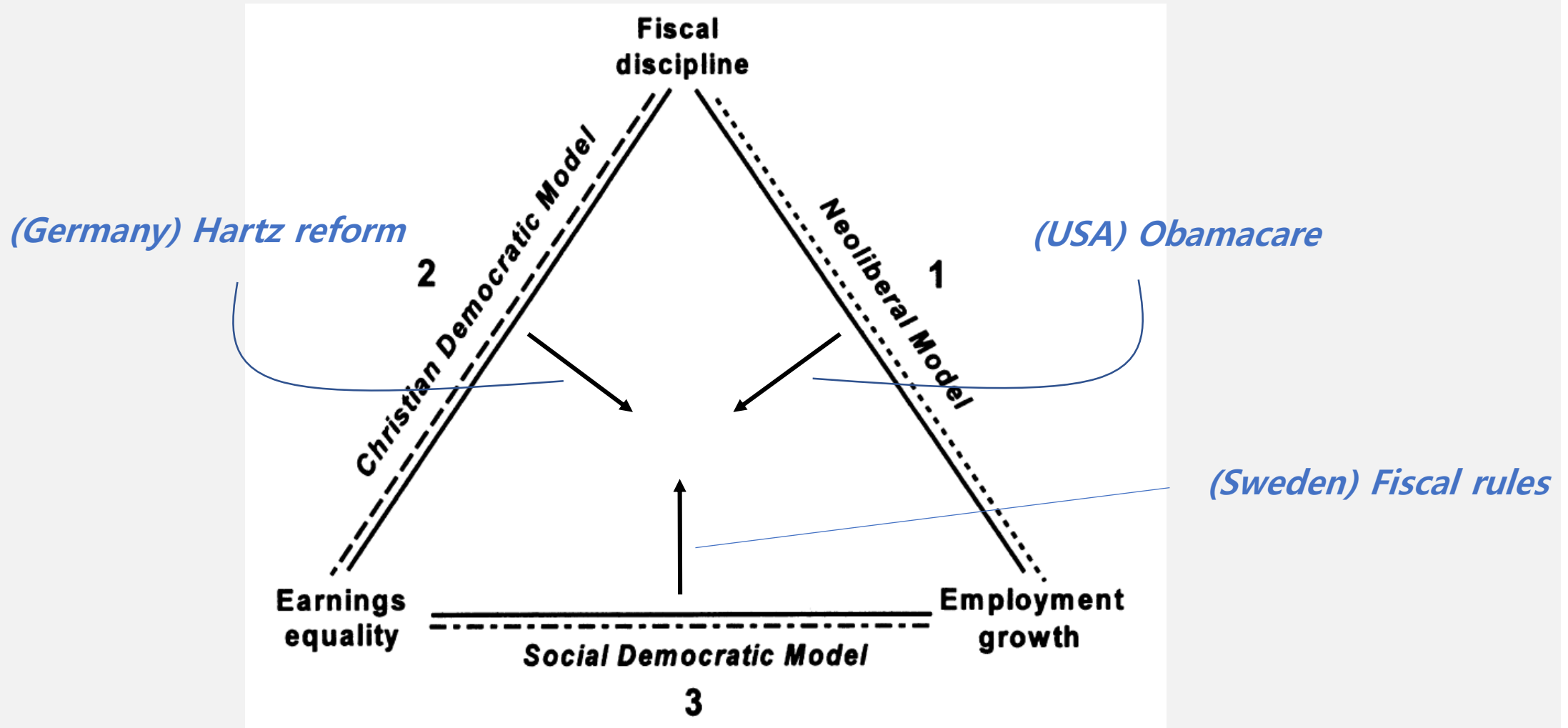
Key Issues for Inclusive Growth

The trilemma of the service economy (Iversen & Wren, 1998)



Source: Torben Iversen and Anne Wren, "Equality, Employment, and Budgetary Restraint: The Trilemma of the Service Economy," *World Politics*, Vol. 50, No. 4, 1998, pp. 507-546.

Efforts to overcome the trilemma



(USA) Affordable Care Act (2010)

- Health insurance for the general public, complementing the other social insurance programs introduced during the Great Depression
- Halved the number of uninsured persons

(Germany) Hartz reform (2003-2005)

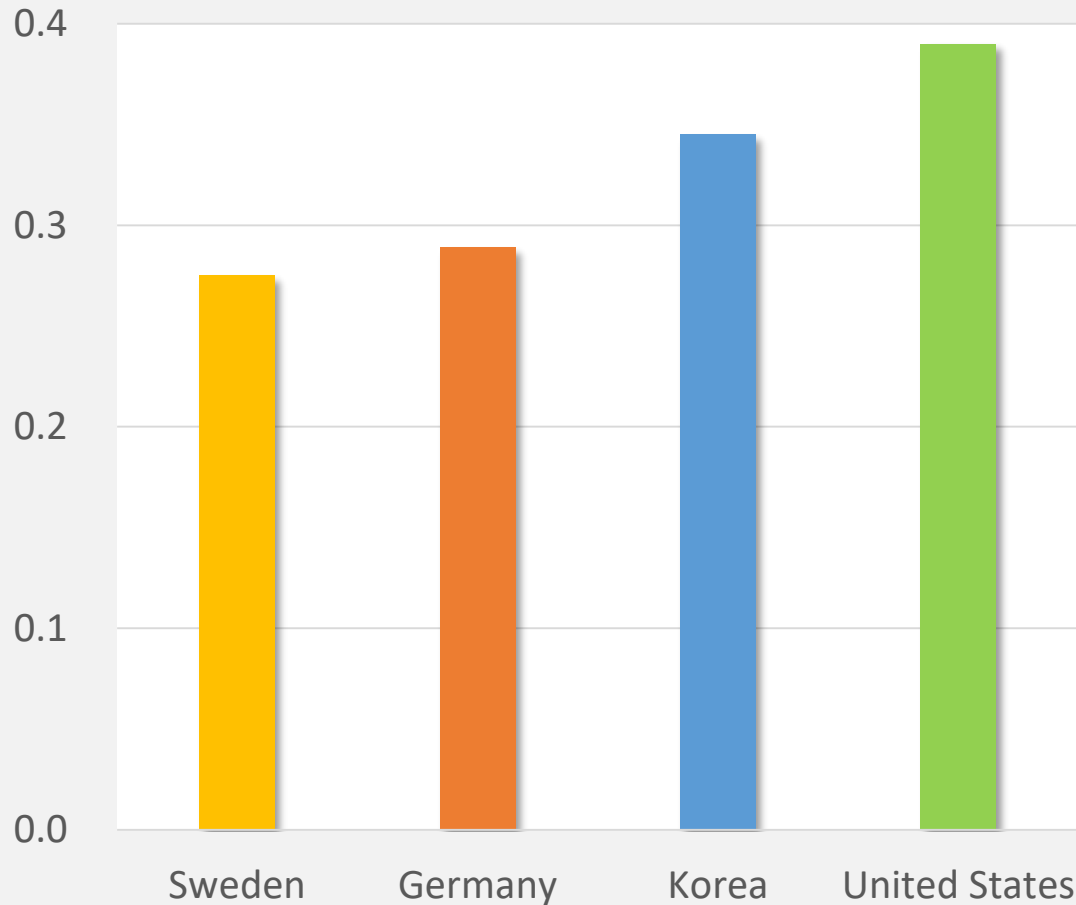
- Improving the employment service (*e.g.* expanding outsourcing)
- Strengthening activation (*e.g.* reducing unemployment benefits, obligating job-search, introducing minijobs and midijobs)
- Enhancing labor market flexibility (*e.g.* reducing restrictions on the use of temporary workers and on dismissals)

(Sweden) Fiscal discipline (since the 1990s)

- Expenditure ceilings (mid/late 1990s)
- Surplus target (2001, revised 2019: 1/3% of GDP)
- Fiscal policy council (2007)
- Debt anchor (2019): 35% of GDP $\pm 5\%$

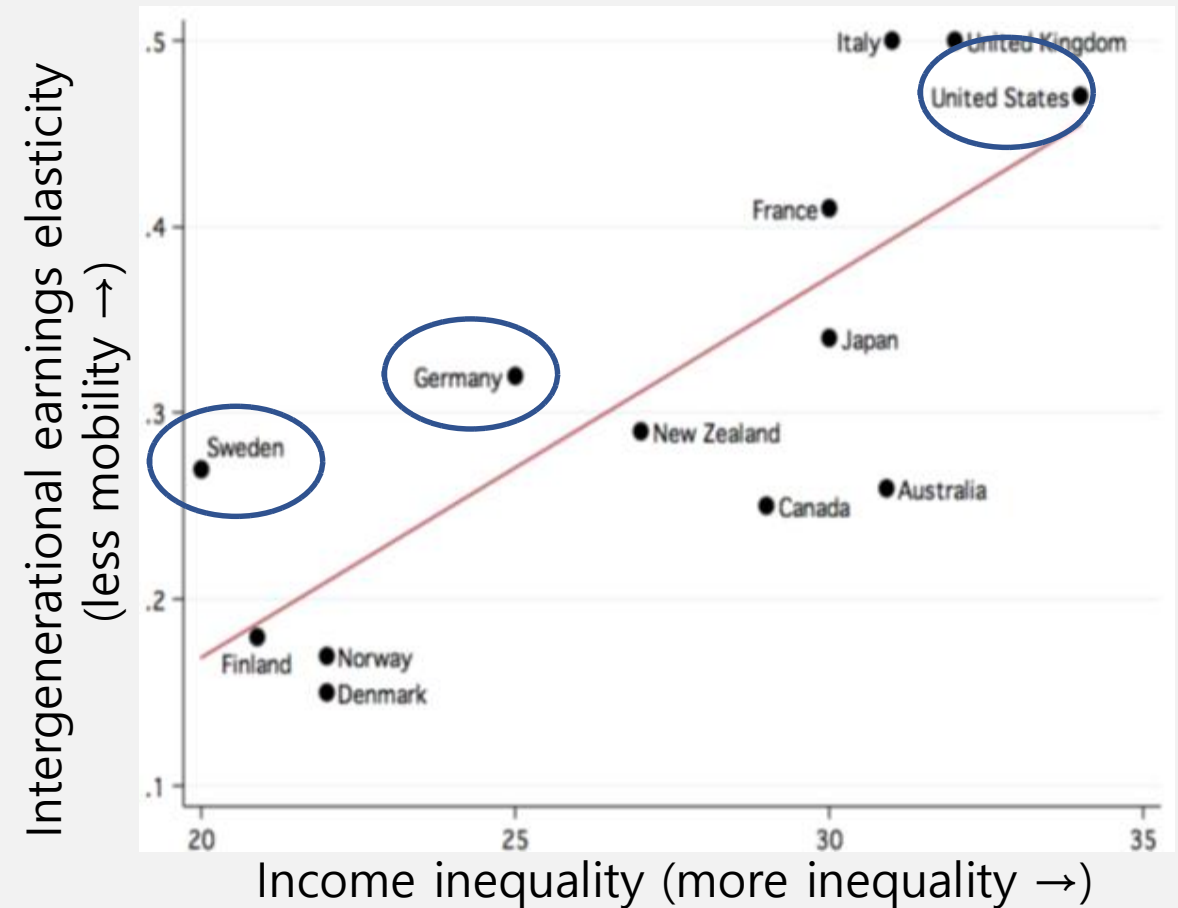
Assessments: Inequality and mobility

Income inequality (Gini, 2018 or the latest)



Source: OECD (<http://stats.oecd.org>).

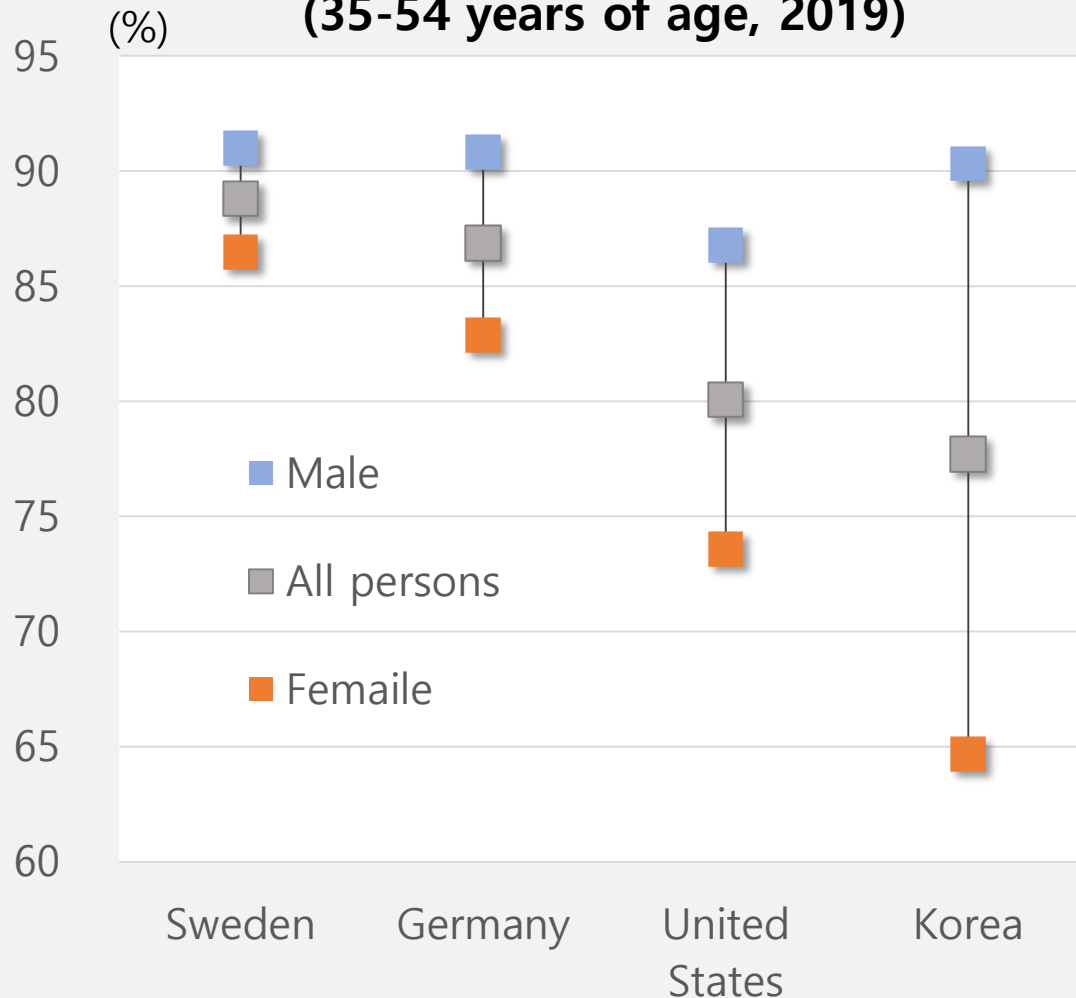
Intergenerational mobility



Source: Miles Corak, "Income Inequality, Equality of Opportunity, and Intergenerational Mobility," IZA DP No. 7520, July 2003.

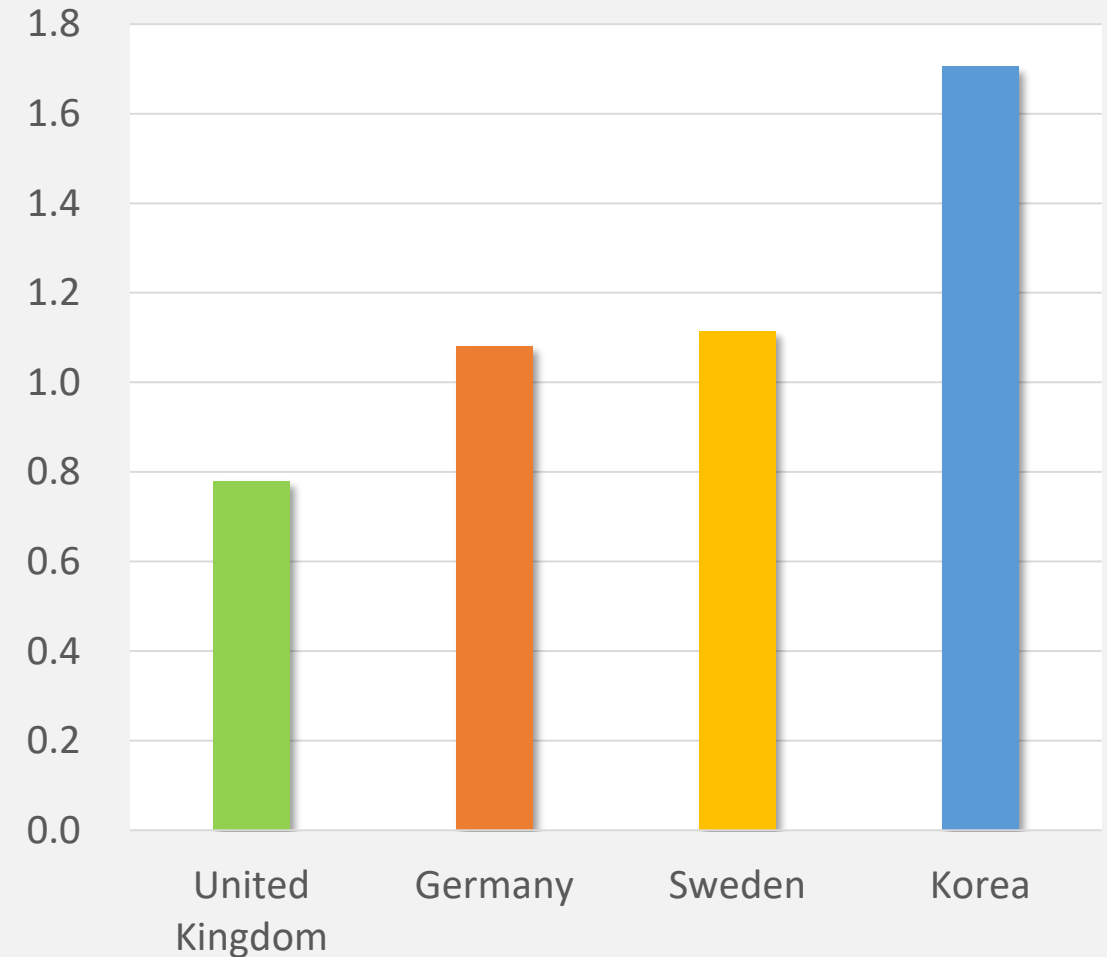
Assessments: Job creation

**Employment-to-population ratio
(35-54 years of age, 2019)**



Source: OECD (<http://stats.oecd.org>).

Product market regulation (2018)

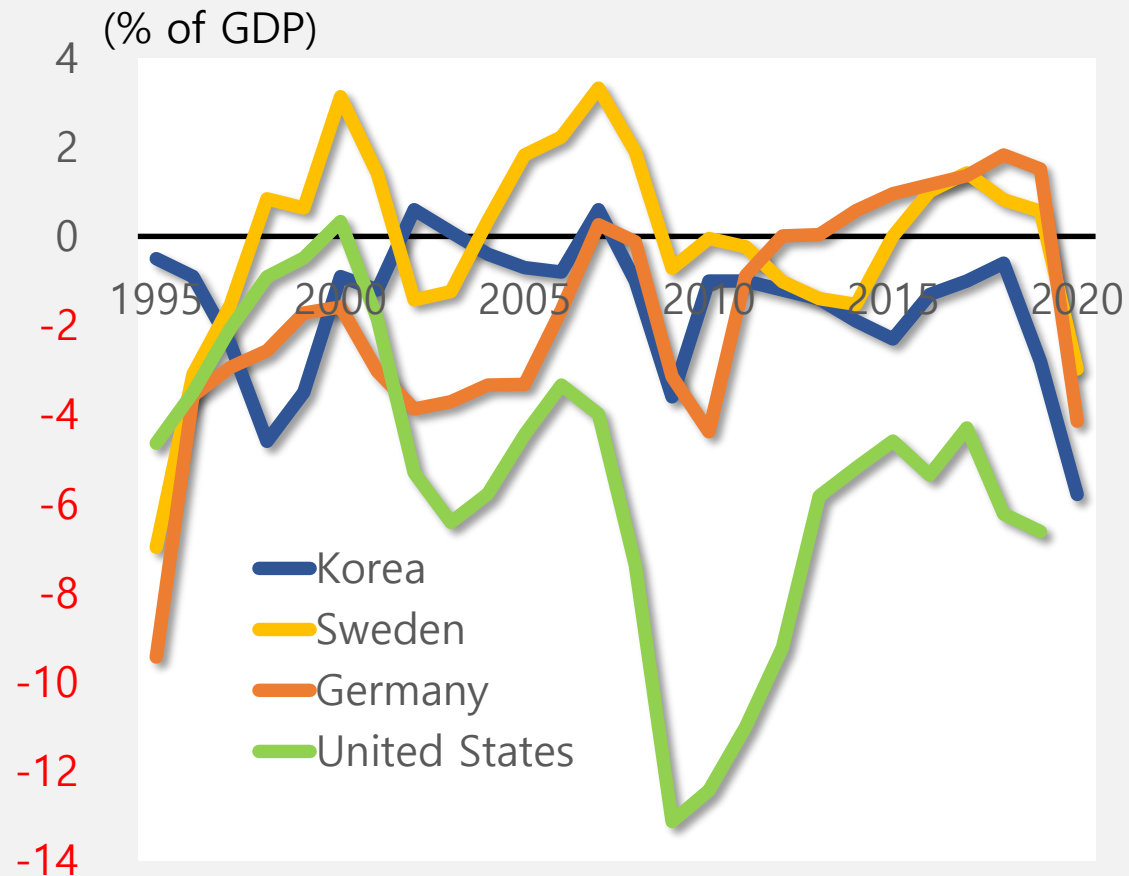


Note: The value for the PMR indicator ranges from 0 (least restrictive) to 6 (most restrictive).

Source: OECD (<http://stats.oecd.org>).

Assessments: Fiscal discipline

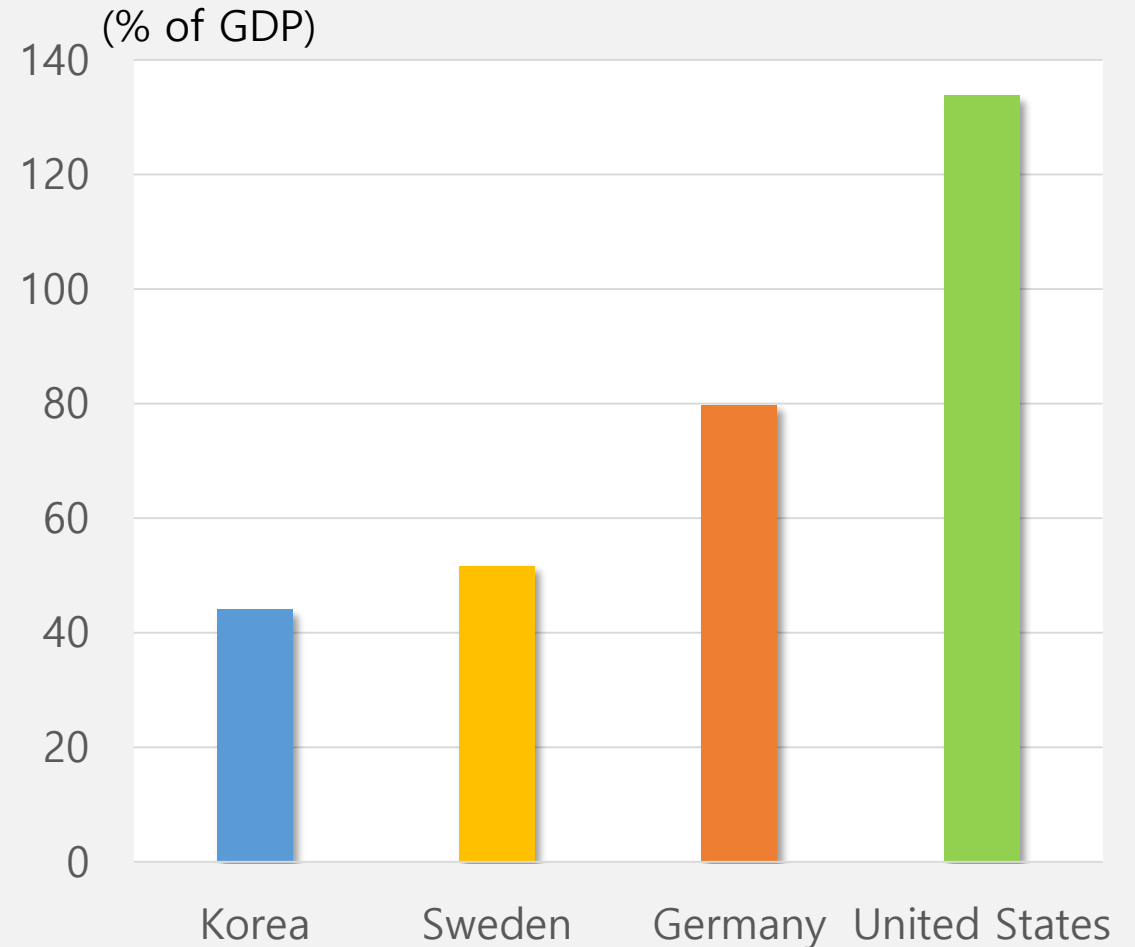
General government net lending/surplus



Note: For Korea, the data is for the central government financial balance excluding social insurance funds.

Source: OECD (<http://stats.oecd.org>). Mistry of Finance and Economy (<http://moef.go.kr>).

General government debts



Note: For Korea, the combined debts of the central and local governments.

To summarize,

- ☐ We need to pursue three goals simultaneously, *i.e.*, **earnings equality, job growth & fiscal sustainability.**
- ☐ Korea lags behind Sweden & Germany on the first two scores, while its fiscal sustainability is deteriorating rapidly.
- ☐ **A strategy for strong growth of QUALITY JOBS** is needed for workers, while maintaining fiscal sustainability.



Proposals for Korea's Inclusive Growth

What is an “inclusive” growth?

It means that **opportunities for political and economic participation** are open to all people so that they can actively engage themselves in productive activities and create wealth.

In contrast, many countries have an elite group that **monopolize on political power and distort the economic system** to their advantage, crippling economic growth and aggravating inequality. Acemoglu & Robinson (2012) call such a system as an **“extractive”** one.

“Inclusive growth” goes beyond redistribution through taxes and transfers and emphasizes equitable **“primary distribution”** based on productive activities such as education, investment, and work.

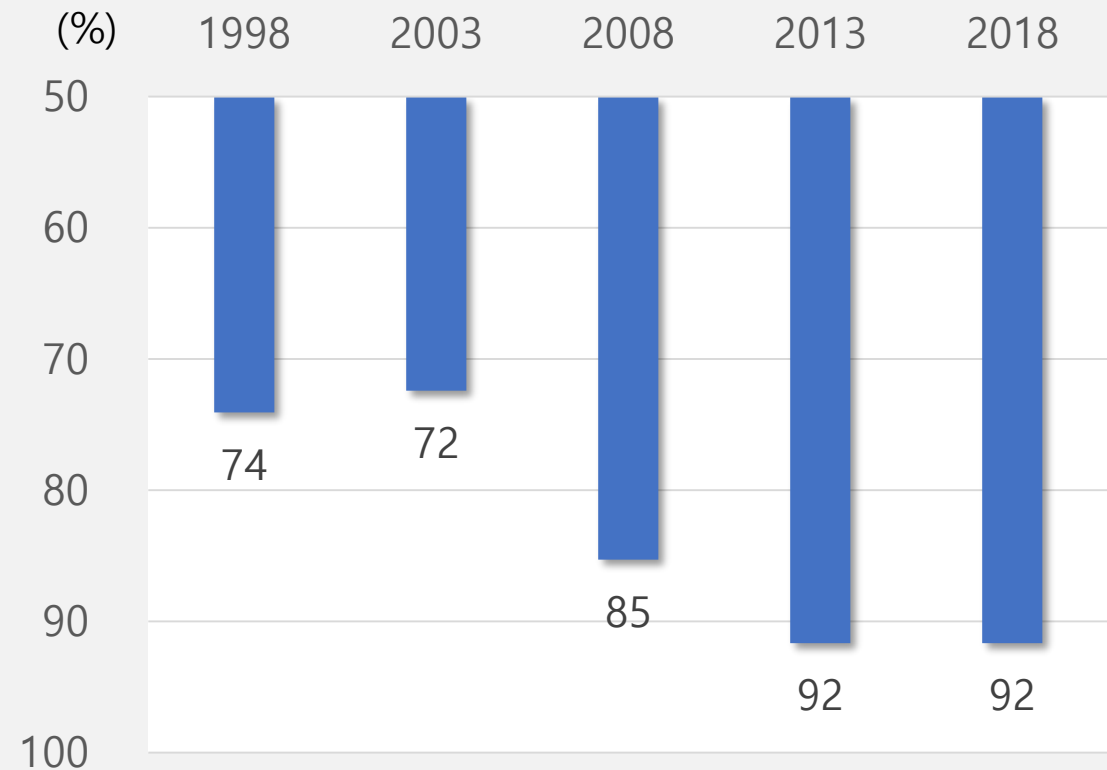
Source: Daren Acemoglu and James A. Robinson, *Why Nations Fail: The Origins of Power, Prosperity, and Poverty*, New York, NY: Crown Business, 2012.



Productivity growth

- ☐ **Regulatory reform** to boost competition, unleash entrepreneurship, and facilitate transition toward a knowledge economy.

Korea's percentile ranking in the OECD product market regulation indicator



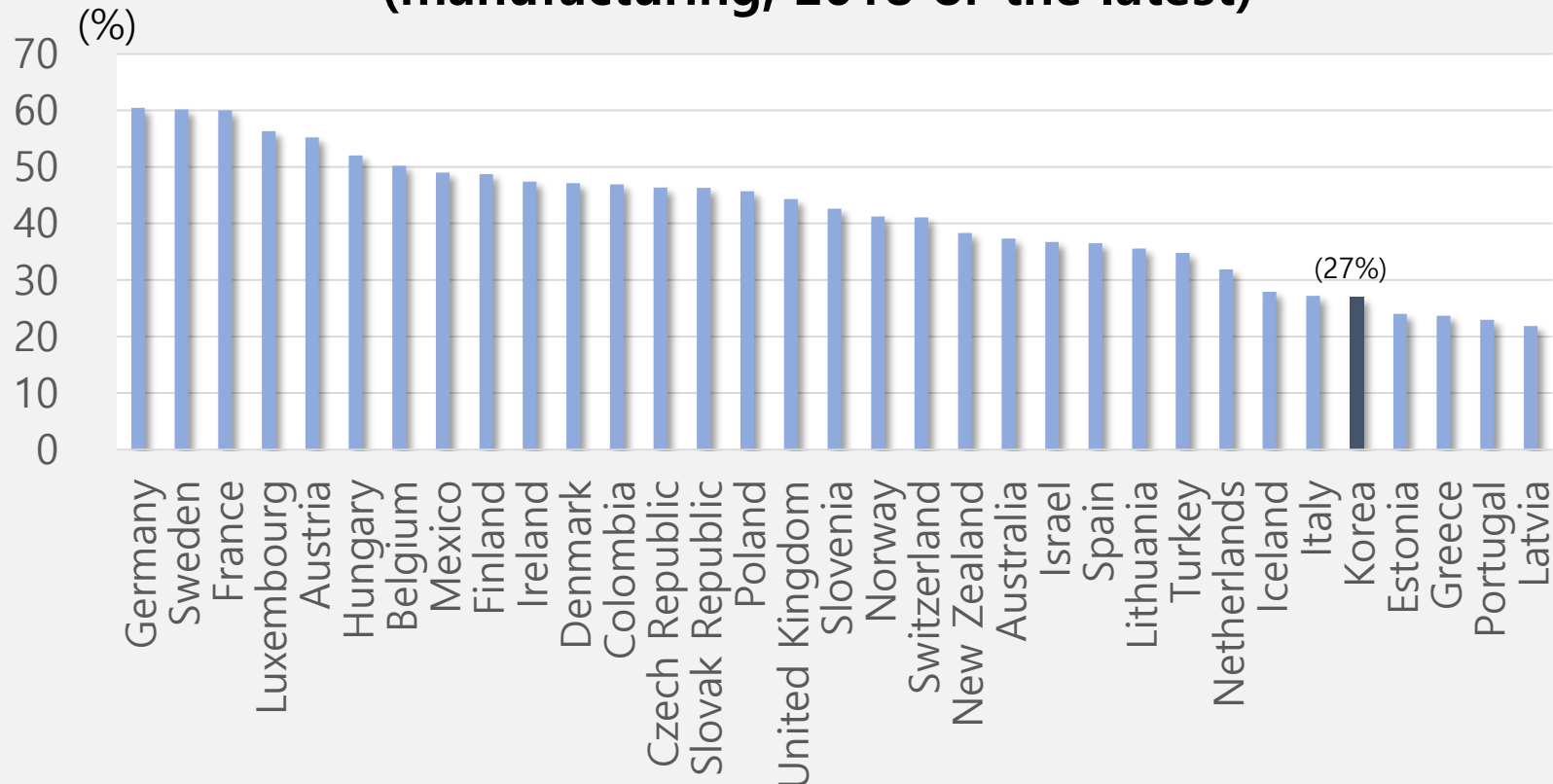
Note: A higher value indicates a more restrictive regulatory regime.

Source: OECD (<http://stats.oecd.org>).

Productivity growth

□ Encouraging the **scaling-up** of SMEs and start-ups

**Employment share of firms with 250+ workers
(manufacturing, 2018 or the latest)**

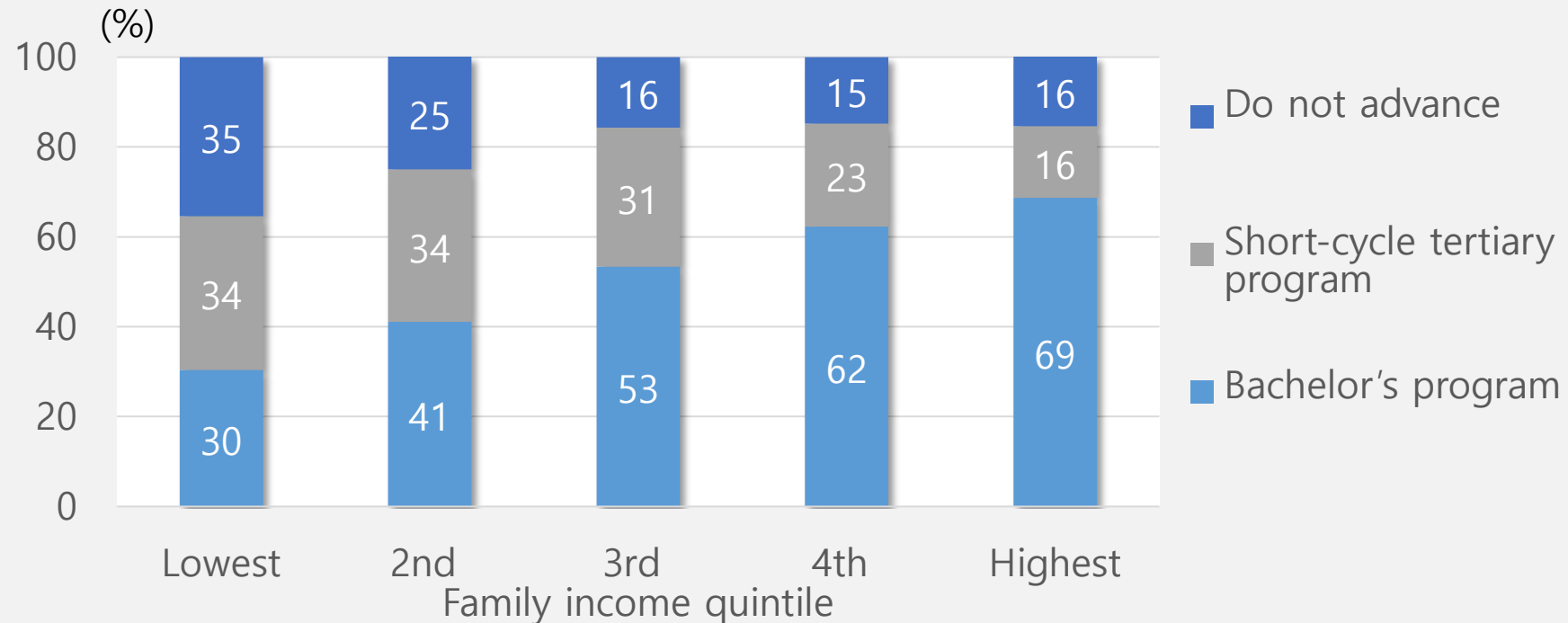


Source: OECD, Structural and Demographic Business Statistics (ISIC Rev. 4).

High-quality human resources

- Leveling the playing field
by **monitoring the performance of schools and teachers**
in helping the disadvantaged

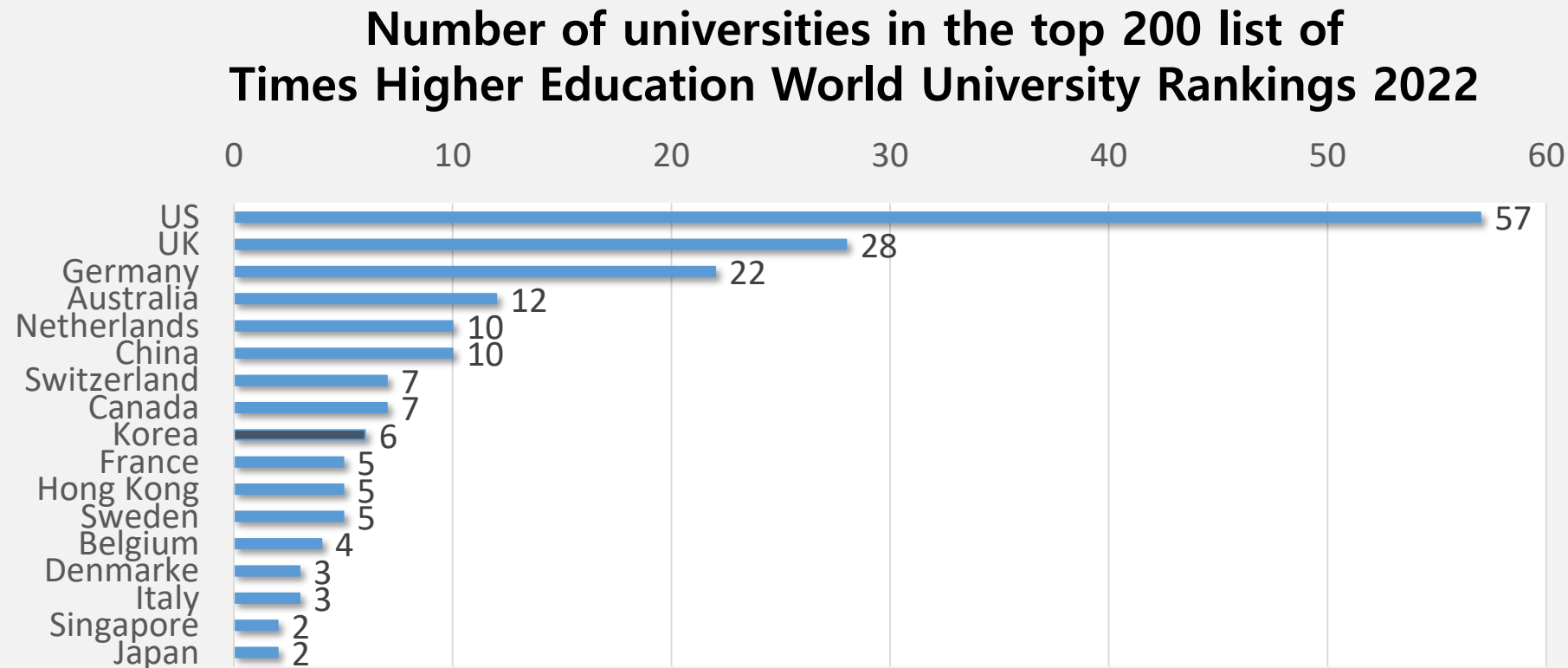
Fraction of high-school graduates advancing to tertiary education



Source: P. S. Choi and I. S. Min, "A Study on Social Mobility across Generations and Inequality of Opportunity," *Journal of Social Science*, Vol. 22, No. 3, 2015, pp. 31-56.

High-quality human resources

- Upgrading the higher education, increasing its **responsiveness to changing demands** and facilitating its market-based restructuring



Source: THE World University Ranking (<https://www.timeshighereducation.com>)

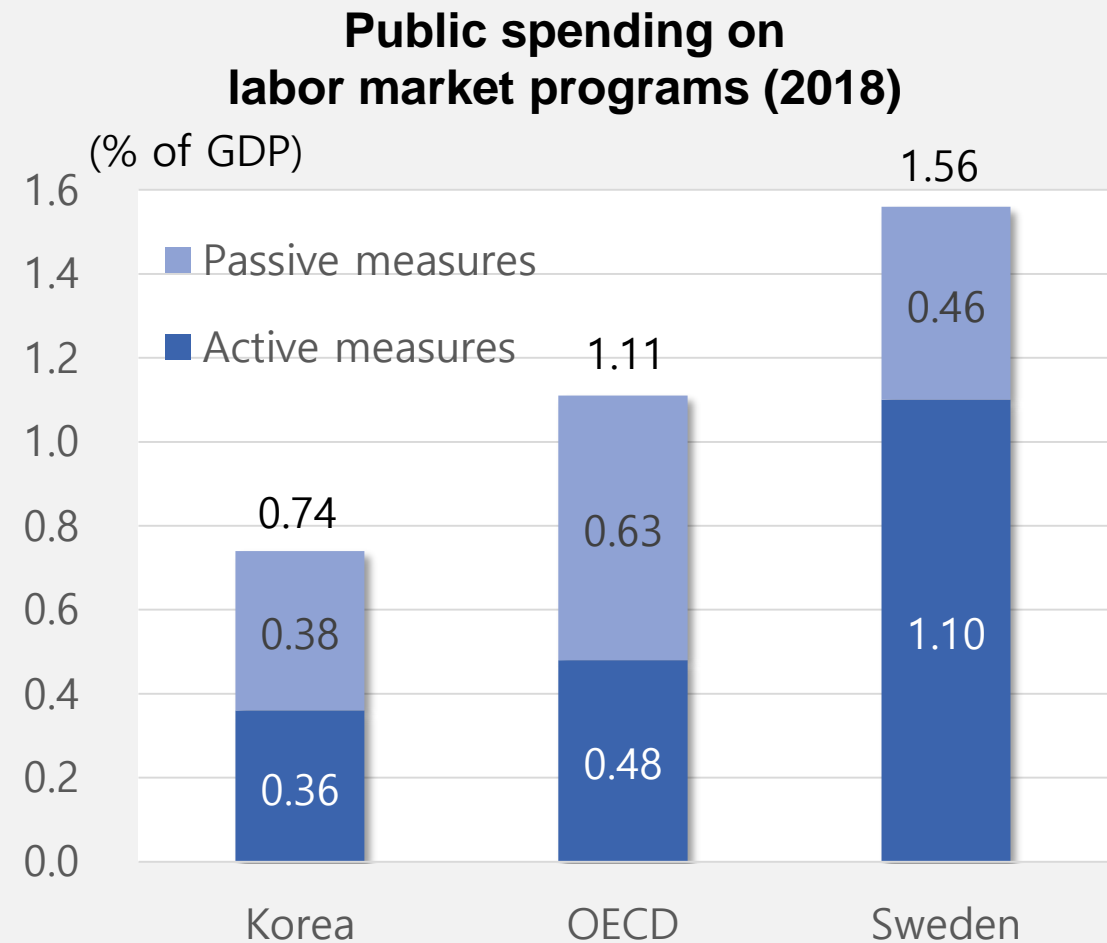
Effective protection of workers

Two ways to protect the workers

	Employment protection	Social safety net (Income support / active labor market policies)
Key features	<ul style="list-style-type: none"> • Protection of regular workers against dismissal • Restrictions on the use of fixed-term, TWA, and other types of non-regular workers 	<ul style="list-style-type: none"> • Cash handouts (unemployment benefits, EITC, etc.) • Training, employment services (counseling, job placement), etc.
Strengths	<ul style="list-style-type: none"> • Effective protection with little burden on public finance 	<ul style="list-style-type: none"> • Flexible response to changes in economic environment • Promoting human resource development and utilization
Weaknesses	<ul style="list-style-type: none"> • Less flexibility in coping with changes, possibly leading to slower growth and job creation • Insider/outsider problem and labor market dualism 	<ul style="list-style-type: none"> • Fiscal burden • Effectiveness of active labor market policy not guaranteed (Martin, 2000)

Effective protection of workers

- Expanding labor market programs while strengthening the **performance management of employment services and job training programs**



Source: OECD (<http://stats.oecd.org>).

Effective protection of workers

□ Deregulating the labor market

○ Regular workers

- Reinstatement of unfairly dismissed workers is the norm in Korea,
- While monetary compensation is the norm in other OECD countries.

○ TWA (temporary work agency) workers

- Allowed only for 32 tasks in Korea
- No restriction in UK or US; Negative list system in Germany and Japan

○ Fixed-term workers

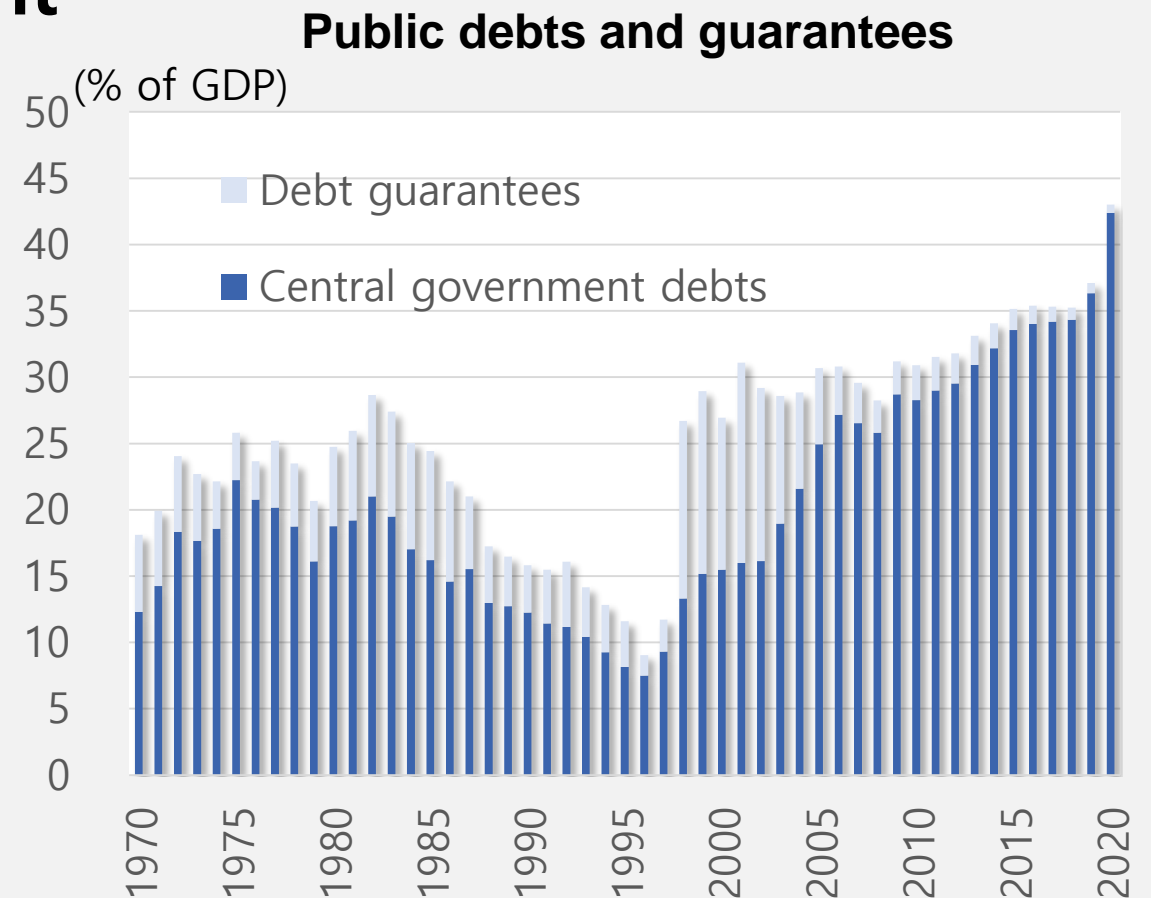
- Allowed only up to 2 years in Korea
- Shorter than in Germany (left to collective bargaining), Japan (5 years), or Spain (3 years)

○ Use of substitute workers or outside suppliers during labor disputes

- Strictly prohibited in Korea
- No restriction in US or Germany; Use of substitute workers allowed in practice in Japan; Use of outside suppliers allowed in France

Fiscal discipline

- Restraining the growth of public debts with strong **political commitment embodied in fiscal rules**
- Preparing also for the **long-term risk arising from population aging**
 - Swedish example: Converted into a **notional defined contribution (NDC) system** in the mid-1990s as a fundamental solution to population aging and growth slowdown.



Source: Ministry of Economy and Finance.

What makes the reforms difficult (if not impossible)?

Reforms

- Regulatory reform
- Changes in the policies for SMEs & the *chaebol*
- Reform of schools & colleges
- Labor market reform
- Fiscal reform

Conflicting values

- SMEs vs large firms
- Efficiency vs equity
- Economy-wide productivity growth vs balanced regional development

Vested interests

- Recipients of public supports & protections
- Teachers & professors
- Labor unions
- Populist politicians

Policy
research
community

Media

Civic
society

Political
institutions

QUALITY
JOBS



**World-leading Think Tank,
Shaping the Future**

KDI 1971-2021

Thank you