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The case of Korea

This case study provides an overview of recent trends in income inequality in Korea, and discusses how considerations for inequality and distributional implications of public expenditure are brought to bear as part of the budget process. It discusses the practices currently in place in the country, how they are set up in the country's public expenditure frameworks, and how they are supported at the technical level, through the range of models, and data tools that are utilised in policy practice.

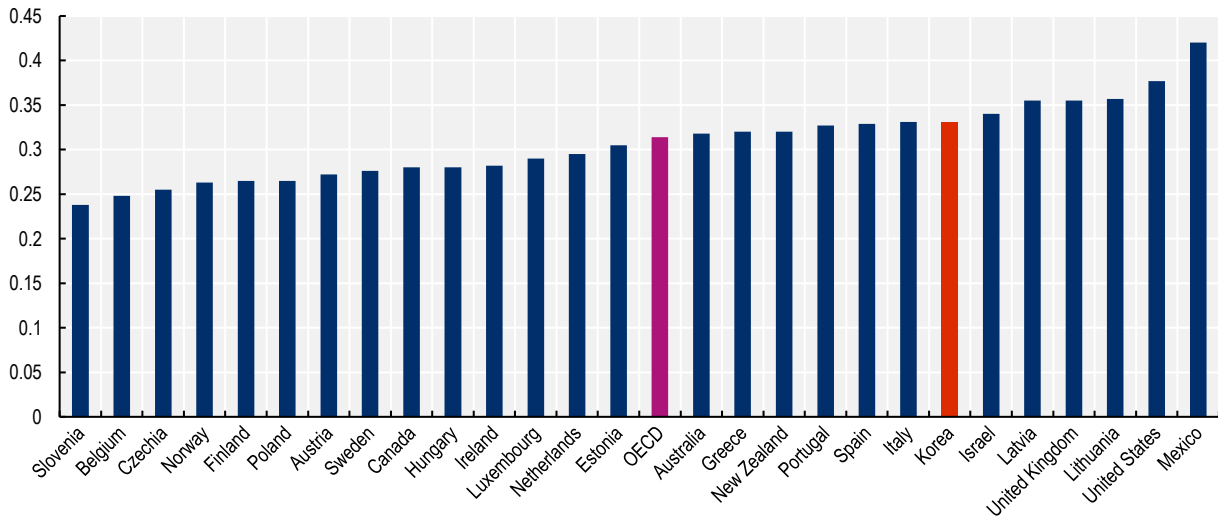
6.1. An overview of recent trends in inequality in Korea

While economic researchers have always had a great interest in income and wealth, multidimensional inequality assessments that move beyond traditional economic metrics are generally considered to be a more recent type of approach. In this spirit, this chapter will examine various inequalities in Korea such as housing, health, education, and regional inequalities.

6.1.1. Income inequality

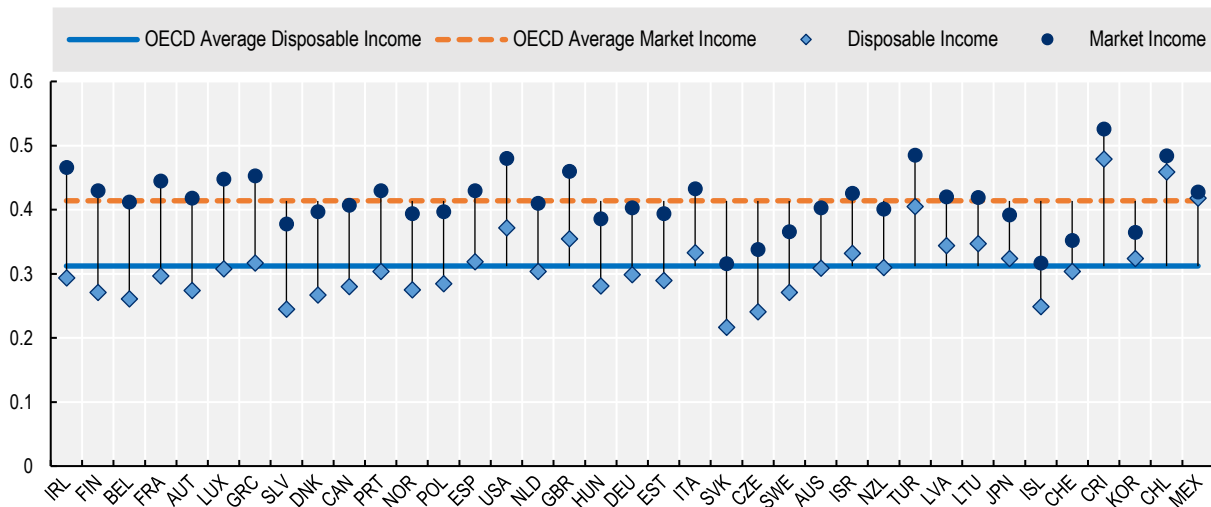
The disposable income Gini coefficient of Korea was 0.331 in 2020, above the OECD average.

Figure 6.1. Disposable income Gini coefficient of Korea



Source: OECD. Stat

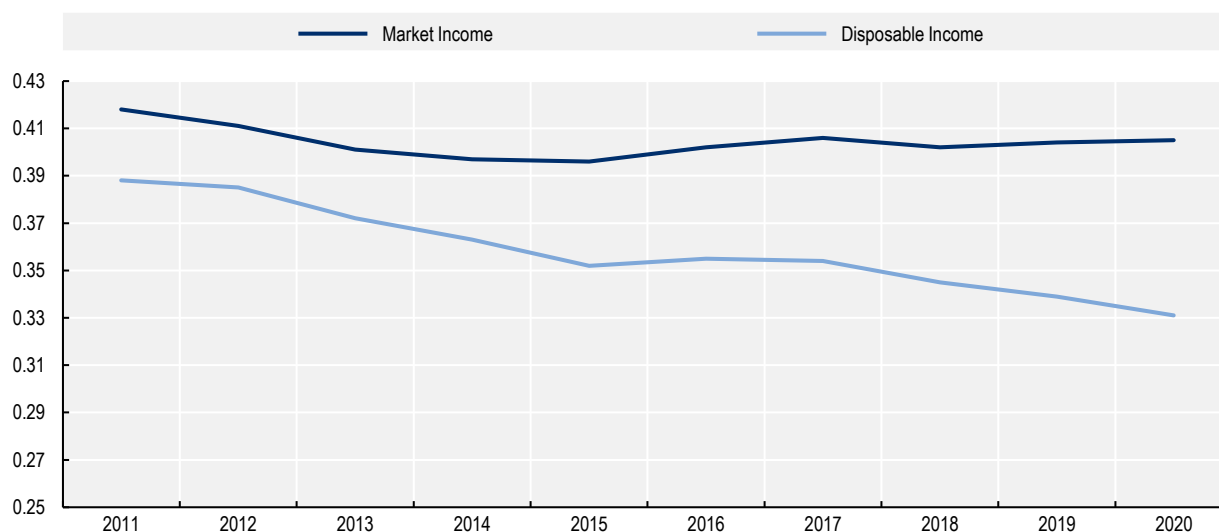
Figure 6.2. Differences in household income inequality among the working-age population, pre- and post-tax and government transfers, 2019



Notes: Countries are ranked from the highest to the lowest difference before and after taxes. Before taxes and transfers data for Mexico are post taxes but before transfers. The latest data refer to 2019 for all countries except Costa Rica and the United States (2021); Australia, Canada, Latvia, Korea, Mexico, the Netherlands, New Zealand, Norway, Sweden and the United Kingdom (2020); Ireland, Italy, Japan and Poland (2018); Chile, Iceland and South Africa (2017). No data available before 2018 for Belgium and Japan or before 2015 for Luxembourg and South Africa. Earlier data for Brazil, Chile, Estonia, Sweden and the United States are from 2013.
Source: OECD Income Distribution Database

While Korea has a lower market income inequality level than the OECD average, the impact of its tax and transfer system on the Gini coefficient is smaller than in most OECD countries.

Figure 6.3. South Korea's market and disposable income Gini coefficients over time



Source: OECD. Stat

The market income Gini coefficient decreased slightly between 2011 and 2020, while the disposable income Gini coefficient for the same time period decreased at a greater rate (see figure 3). This may well reflect the fact that the 19th National Assembly, which was in place between 2012 and 2016, highlighted the importance of using tax policy to reduce inequality, and thus shifted the policy objective for corporate and value-added tax from economic growth to inequality reduction (Korean National Assembly Budget Office (국회예산정책처), 2017^[1]). As a result, corporate tax increased from 12.2% in 2011 up to 33.6% in 2016, and property tax law from 10.5% to 49% (Korean National Assembly Budget Office (국회예산정책처), 2017^[1]). This trend towards equity-oriented tax policies continued under President Moon Jae-in (문재인 in Korean), who reformed the income tax system in 2017 in order to further increase its redistributive impacts.

Such policies aiming to reduce income inequality have tended to focus on tax reforms rather than transfers. While a welfare system does exist in Korea, and indeed has expanded in the past decade (전규식, 정지수, 유경원 (Jeon G., Jeong, J., Yoo G.), 2016^[2]), social welfare expenditure is lower than in many other countries – In addition, the degree to which fiscal spending contributes to reducing income inequality tends to be comparatively lower in Korea (Yeonhap News, 2018^[3]).

6.1.2. Housing Inequality

In the past several decades, firm land ownership has increased while individual land ownership has decreased. In 1945, the Gini coefficient stood at 0.73, although this was reduced to 0.39 in 1960 after land reform saw redistribution of the land owned by former colonial landlords. Since then, wealthy farmers have started to gain more land, and during Korean industrialisation moved to metropolitan areas and were able to build factories and other infrastructure on this land. As such, the figure has climbed back up again steadily, reaching 0.811 in 2019. While this is certainly a major issue facing the Korean economy and merits further research, such an issue is related to wealth inequality and cannot be addressed directly through public expenditure and transfers, and is thus beyond the scope of this paper

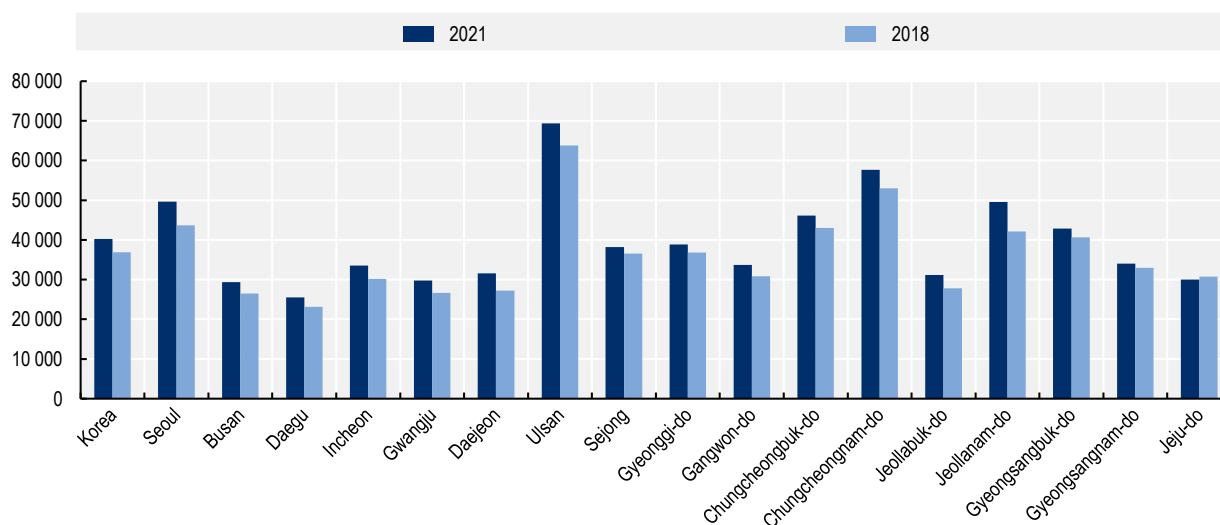
6.1.3. Health and education inequality

The Korea Institute for Health and Social Affairs provides several indexes¹ to measure health inequality in Korea, in order to be able to develop and monitor any health-oriented policies. Education inequality in Korea measures high-ranked university entrance, high-ranked science and engineering department entrance and postgraduate education. Most of these measures are highly dependent on parents' education level, household income, gender, and region of origin. However, the influence of parents in education inequality does not show an increase (김준형 (Kim J.), 2018_[4]). While again, these topics are important issues in Korea, an in-depth discussion of health or education inequality would go beyond this study's focus on the direct income distributional aspects of public expenditure.

6.1.4. Regional inequality in per capita income

The Korean Statistical Information Service (KOSIS) provides data looking at living standards at the regional level. These data consist of 7 main dimensions, including employment and labour and social integration.² They show that the majority of regions have seen an increase in GDP per capita between 2017 and 2020, with some of the highest percentage increases attributable to some of the lowest-income regions, including Daegu, Gwangju and Daejeon.

Figure 6.4. GDP per capita for each region



Source: Korean Statistical Information Service

6.2. Budgeting frameworks related to inequality and well-being

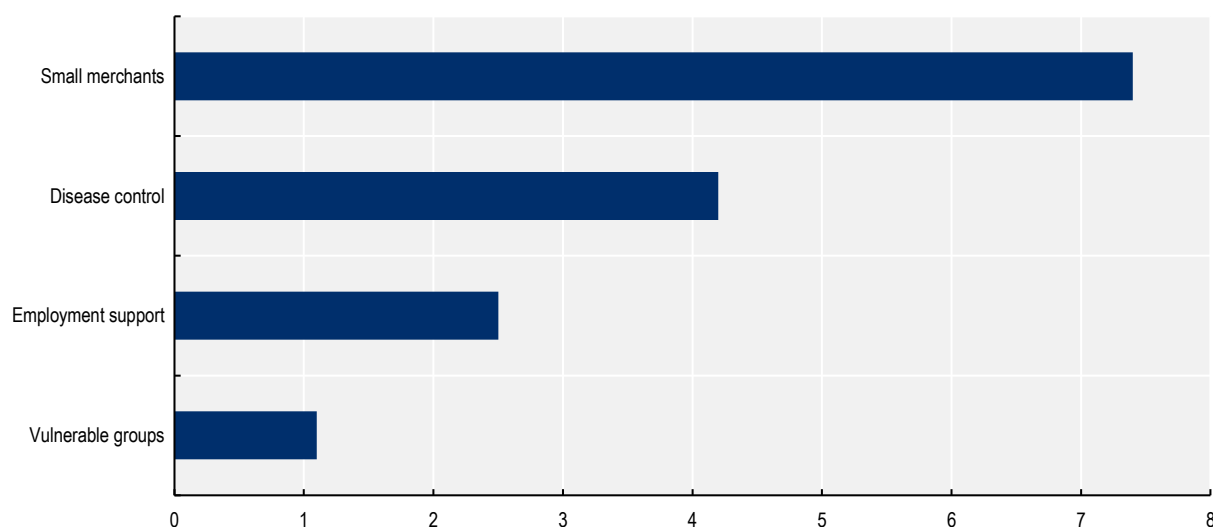
6.2.1. The budgeting process in Korea

Between 31 December and 31 January, the Ministry of Economy and Finance receives submissions of medium-term business plans from each government office. The Ministry then has two months to send instructions on budget plans based on these business plans back to the offices, and formulate that year's budget. This budget formulation is then submitted to parliament, who have 90 days to discuss it. The modified version is then given to the Minister of Economy and Finance, who assigns it to the relevant central government offices for execution. Once policies have been enacted, each head of a central government office must submit a settlement report of the fiscal year to the Minister of Economy and Finance, as required by the Public Finance Act. The Minister then aggregates tax revenue and expenditure and submits this overall settlement report to the Board of Audit and Inspection and the President, who then inspect the report before sending it to Parliament.

The 2023 Korean governmental budget plan states that its main goal is to exert fiscal restraint to maintain financial stability, following the unexpected spike in expenditure over the past few years aimed due to covid-19 related policies. However, the budget plan will also incorporate considerations related to multidimensional inequality and redistribution.

Aggregate revenue in 2023 is predicted to be 625.9 trillion won, and aggregate expenditure is predicted to be 639 trillion won. This represents an increase of 8.7% since 2018, although it is a 5.2% reduction compared to last year's expenditure levels.

Figure 6.5. First supplementary budget for 2021 (KRW trillions)



Source: Korea governmental budget plan 2023

6.2.2. Budget measures to offset inequality

The Korean government's 2023 budget plan consists of several policies relating to inequality reduction³. These take the form of several overarching aims which then contain various policies within them.

One of these aims is to reinforce the social safety net. The Korean government plans to increase the standard median income by 5.47% -- a move that will alter the threshold for receiving basic livelihood security and medical benefits, and thus increase the number of recipients. Subsidies to support the vulnerable in social security living, education, medical benefits, and housing will also increase. Furthermore, social insurance will be modified to help 280 thousand blind spot workers⁴, involving new insurance for housing fraud and subsidies for poor housing environments. As a result, income, health, and housing inequalities are expected to decrease.

A second aim is to protect the socially underprivileged. To this end, the government plans to raise disability benefits and disability pension benefits, as well as provide funding for 8 hour-care for those with developmental disabilities. It will also subsidise call taxis for those with disabilities, and medical procedures such as disability pre-detection for children.

The third aim is to balance regional development. The budget outlines new subsidies for farmers and fishermen who have been in the blind spot, that is, should receive subsidies but do not. In addition, the government plans to increase the low-population rural area budget, and build infrastructure such as universities, smart cities, research institutes, and administration departments in rural areas.

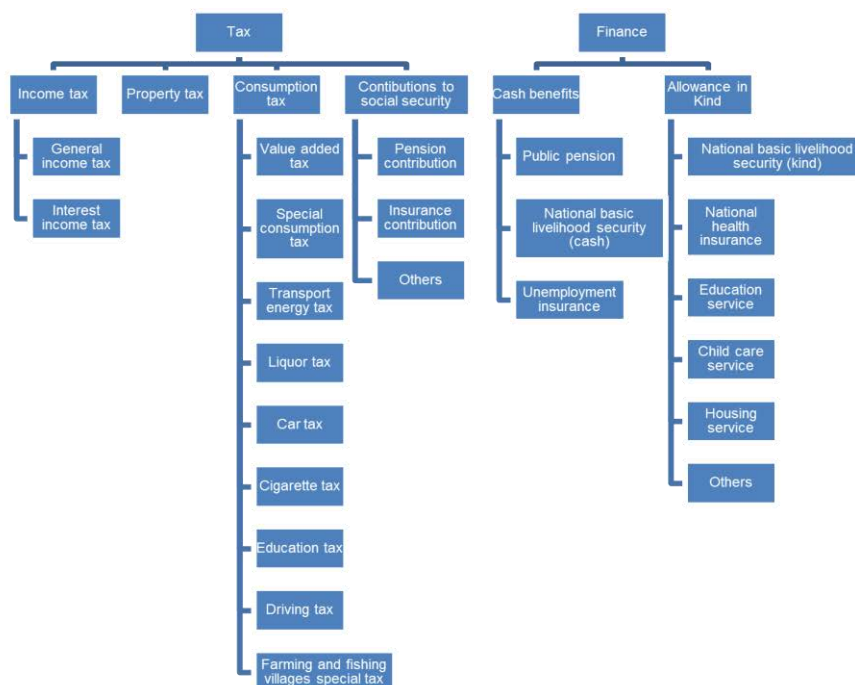
The fourth aim is to increase the fertility rate. The government will subsidise parents who take care of infants, and will increase the level of support targeting low-income households and single parents through the free provision of diapers, powdered milk, and other products. For single parents and double-income households, it will build more childcare infrastructure. Finally, the government will increase parental leave subsidies for both employers and employees.

6.3. Tools for assessing the distributional impacts of budget decisions

6.3.1. Microsimulation models in the Korea Institute of Public Finance (KIPF)

The Korea Institute of Public Finance (KIPF) houses two main microsimulation models, known as KIPFSIM08 and KIPFSIM10. KIPFSIM08 focuses on taxation and fiscal policy effects, especially income tax, consumption tax, pensions, and health insurance, while KIPFSIM10 is a variant of KIPFSIM08 with a greater number of social insurance programmes incorporated.

Figure 6.6. Organisational structure of KIPFSIM08



Source: (선명재, 전병목, 전병힐 (Seong M., Jeon B., Jeon B.), 2009^[5])

KIPFSIM08 was created in 2008, with the intention of creating greater capacity within government to verify the expected success and efficiency of proposed policies. It came alongside the Earned Income Tax Credit, a popular policy in Korea at the time, for which the Korean government was keen to create simulations. The types of tax and transfers it accounts for are indicated in Figure 6.6.

When the model is run, it first gathers demographic variables such as age, gender, education level, and income. At the intermediate step, the tax policy is parametrized and estimated. Given these estimated tax policies, parameters such as labour supply elasticity are subsequently estimated. The user can then choose a scenario, such as a social pension increase, and calculate the income distribution inequality index before and after the application of a scenario.

Table 6.1. KIPFSIM10 simulation analysis result

Income with Policy	Gini Coefficient
Market Income	0.37667
Private Transfer	0.35971
Public Transfer	0.32969
Income Tax and Wealth Tax	0.31727
Disposable Income	0.31260

Source: Korea Institute of Public Finance

The models are updated on an ad-hoc basis, dependent on researcher wishes. Both KIPFSIM08 and KIPFSIM10 are static models, although KIPFSIM10 is able to go some way towards estimating labour supply elasticity by looking at labour market participation. It is worth noting that both rely entirely on survey data, and as such suffer from several measurement issues. Furthermore, microsimulation models are not often used to aid in government decision making.

6.3.2. Data and information infrastructure

This section introduces four key public data sources used in distributional impact analysis: the National Survey of Tax and Benefits, the Korean Longitudinal Study of Aging, the Korean Education and Employment Panel, and the Korea Welfare Panel Study.

- The National Survey of Tax and Benefit data consists of survey data to analyse tax policy and welfare expenditure effects. It consists of a number of variables including income, housing, household expenditure, earned income tax credits (EITC), transfer income, vehicle, education, and pensions. It consists of 5 634 households and uses both individual- and household-level data.
- The Korean Longitudinal Study of Aging data focuses on the middle and old-age population. It consists of activities of daily living (ADL), medical service usage, body function, self-evaluated health, high blood pressure, and diabetes, among other factors. It consists of 10 254 households and uses both individual- and household-level data.
- The Korean Education and Employment Panel is focused on the student population. It consists of education experience, university entrance, labour market participation preparation, and job training, among other factors. It consists of 2 000 middle school students, 2 000 vocational school students, and 2 000 high school students.
- The Korea Welfare Panel Study is focused on poverty. It consists of working poor and near-poor population characteristics, labour participation status, policy benefits, and income and wealth of the poor, among other factors. It consists of 7 000 households, where 3 500 are low-income and 3 500 are general.

6.4. Challenges of developing an appropriate data and information infrastructure

While there are various ways to improve distributional impact analysis, this section focuses on two of the most urgent issues faced when addressing the information needs that arise as a result of distributional analysis.

A key issue in assessing the distributional impacts is caused by difficulty in combining different data sources. As evident from above, most data sources focus on a specific subject and thus are only able to be used in analyses of narrow topics. Given the increasing prevalence and importance of multidimensional inequality analysis, economists often require large and heterogeneous sets of information. To control such heterogeneity, Korea would benefit from a unified large data set that includes all relevant related information. A major reason why this has not yet occurred is due to privacy concerns, which could potentially be addressed by replacing social numbers with private identification numbers, so that people cannot be directly identified.

The second key issue is that many current policies are the result of a multiplicity of slight additions and modifications over the years and are thus very complicated. This can in turn make research and analysis of policies very difficult, as the intended effects of these policies are often not clear. Given the major changes that have occurred in real world situations, it would be better to overhaul these policies entirely, and simplify them in the process.

To solve both problems, there is a need for a more integrated approach, bringing together the data component and the policy component. Regarding data combination, a central institution tasked with unifying otherwise disparate data sets, similar to those found in Sweden and the Netherlands, would be highly valuable. Moreover, regarding the simplification of public policies, it could be useful for the government to appoint policy design experts who could remove redundant policies and rearrange the existing ones in a well-organised way.

References

- Korean National Assembly Budget Office (국회예산정책처) (2017), *트렌드 세법 (Trend tax laws)*. [1]
- Yeonhap News (2018), “한국 재정지출 소득재 분배 효과 작다...OECD 평균의 1/3 불과 [The income redistribution effect of Korea’s fiscal expenditures is small... Only 1/3 of the OECD average]”, <https://webzine.kacpta.or.kr/news/articleView.html?idxno=2152> (accessed on 23 October 2023). [3]
- 김준형 (Kim J.) (2018), *부모배경에 따른 교육불평등은 심화되었는가?: OECD 5개 국가의 교육불평등 비교 분석 (Socio-Economic Educational Inequality is increasing?: A Comparative Study on Inequality among 5 OECD Countries)*. [4]
- 선명재, 전병목, 전병힐 (Seong M., Jeon B., Jeon B.) (2009), *조세재정모의실험 모형: KIPFSIM08 모형의 구축 (Model of Tax Finance Simulation: Establishment of KIPFSIM08)*. [5]
- 전규식, 정지수, 유경원 (Jeon G., Jeong, J., Yoo G.) (2016), *조세 및 재정지출 정책의 소득재분배 효과 분석 (Income redistribution policy and income inequality in Korea and OECD countries)*. [2]

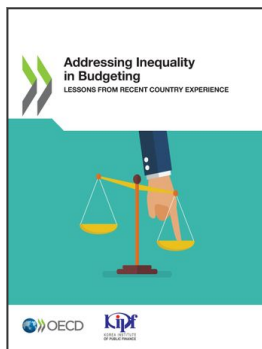
Notes

¹ These indexes consist of child well-being, smoking ratio, exercise level, breakfast, eating fruit, average sleep time, body image distortion, sexual experience, unmet healthcare needs, self-rated health, BMI, stress assessment, depression, suicidal ideation, and suicide attempts

² The other dimensions are health and education, income, consumption, and growth, security and environment, population and household, and housing, leisure, and culture.

³ Examples included basic livelihood security and medical benefits, disability activity support, promotion of the ease of transportation for mobility-disadvantaged persons, youth housing, and military basic pay.

⁴ Defined as workers who have not been enrolled into social security programmes.



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