# A Feasible Basic Income in Korea: To Promote Freedom, Equality, and Sustainable Efficiency

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## Abstract:

With the electoral defeat of the presidential candidate Lee Jae-myung who had pledged to introduce universal basic income in March 2022, South Koreans' interest in and support for basic income seem to have subsided. However, the public discourse in the country may change from a simple and polarized debate about basic income to a more complex and intelligent debate about various versions of basic income, negative income tax and participation income ahead of the next presidential election in 2027. Oh Se-hoon, Mayor of Seoul and a presidential hopeful affiliated with the ruling People's Power Party, has launched a three-year randomized controlled trial of 'Safety Income', a version of negative income tax. Lee Jae-myung is currently the leader of the Democratic Party and may well rerun for presidency in 2027. Kim Dong-yeon, Governor of Gyeonggi-do and a presidential hopeful affiliated with the opposition Democratic Party, is promoting 'Opportunity Income' as a version of participation income. Hence, it is of practical importance to examine the pros and cons of basic income, negative income tax, and participation income and to search for an appropriate and feasible model of income security in the Korean context.

Interest in these income security measures has grown not just in South Korea (simply Korea, hereafter) but in many parts of the world over the last decades. This is largely because the traditional welfare states have been unsuccessful in curbing growing income inequality and poverty. Traditional social assistance programs are stigmatizing the recipients on one hand and producing work disincentives on the other hand. Social insurance fails to cover growing numbers of precarious workers. Proponents of basic income have emphasized that universal provision of basic income will enhance real freedom, equality, and efficiency.

We argue that taxes and transfers(benefits) should be considered together in designing and evaluating income security programs. Analytically, we focus on three kinds of tax rate: effective tax rate, participation tax rate, and marginal effective tax rate. Effective tax rate that considers both taxes and transfers is useful for assessing the effectiveness of redistribution, or enhancement of equality. Effective tax rates should be progressive enough to alleviate poverty through sufficiently high negative rates for the poor and to reduce inequality through sufficiently high positive rates for the rich.

Participation tax rate and marginal effective tax rate are important for assessing work incentives and the effects on economic efficiency. High participation tax rates produce work disincentives at the extensive margin(whether to work or not), and high marginal effective tax rates produce work disincentives at the intensive margin(how much to work). They also inhibit real freedom for social assistance recipients to get out of poverty by choosing to work or work more and make them dependent on social assistance. We will assess how current taxes and transfers as well as various models of basic income, negative income tax, and participation income will have impact on freedom, equality and sustainable efficiency by examining and measuring schedules of effective tax rate, participation tax rate and effective marginal tax rate.

By sustainable efficiency, we mean 1) economically long-term efficiency rather than short-term efficiency, 2) ecological sustainability, and 3) demographic sustainability.

In particular, we will consider the effects of current social assistance programs on the country's extremely low fertility rate(0.78 in 2022) and the risk of population extinction in rural areas and whether these alternative models of income security could help reverse the declining trend of fertility rate and prevent population extinction in rural municipalities. We will also discuss the usefulness of universal basic income for the implementation of socioeconomic reforms such as carbon tax and land-holding tax to promote ecological sustainability and economically long-term efficiency. Introduction of carbon tax is important to fight against climate change. Introduction of land-holding tax is an important tool to enhance long-term economic efficiency as well as equity by detering land speculation and helping stabilize real estate prices.

We will search for a new fiscally neutral model of income security scheme for Korea and present our proposal that integrates universal basic income, negative income tax, and universal EITC. We will examine financial feasibility and redistributive effects of our proposal through microsimulation, using both household survey data and administrative data. We will also examine labor supply effect as well as consumption-boosting effect.

Last, but not least, we will discuss political feasibility of our proposal. We will also discuss to what extent our analysis can be relevant to other countries and how our proposal could be adopted or benchmarked in other countries.

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# **Chapter Outlines**

### **Ch. 1. Introduction**

Background: The Korean context

Basic income to promote freedom, equality, and sustainable efficiency

Negative income tax for effective poverty alleviation

Similarities and differences between basic income and negative income tax

An integrated model of basic income and negative income tax: Negative income tax-type basic income

The importance of effective tax rate, participation tax rate, and marginal effective tax rate

Participation tax rate  $= 1 - \frac{\text{increase in disposable income when working}}{\text{market income when working}}$ 

Effective marginal tax rate = 
$$1 - \frac{\text{increase in disposable income}}{\text{increase in market income}}$$

Introducing universal EITC as a partipation income

Basic income's potential to help increase marriages and family formations and reverse the declining trend of fertility

Summary of our proposal

Methods and data for financial feasibility study and estimation of expected effects

The plan of the book

#### Ch. 2. Sustainable Efficiency of Basic Income

1) Inefficiency of public assistance and restrictions on real freedom

We examine two types of public assistance programs, i.e. fixed-amount of targeted public assistance or filling-the-gap public assistance (make-up guarantee minimum income scheme). Both types of public assistance programs both produce work disincentives and thereby deadweight losses, undermining long-term economic efficiency and restricting real freedom to improve one's situation through labor.



Figure 2-1. Fixed amount public assistance



Figure 2-3. Filling-the-gap public assistance



Figure 2-7. Pareto Superior Negative Income Tax and Basic Income Compared to Filling-the Gap Public Assistance



Figure 2-8 Basic Income and Negative Income Tax with Greater Redistributive Effect than Filling-the-Gap Public Assistance

2) Basic income and negative income tax with Pareto superiority or greater redistributive effect

It's always possible to devise a Pareto-superior negative income tax or basic income scheme than any fixed-amount of targeted public assistance or filling-the-gap public assistance (makeup guarantee minimum income scheme). No one is worse off and some people are better off under the Pareto-superior negative income tax or basic income scheme than under either of the public assistance schemes. Participation tax rates and marginal effective tax rates under public assistance programs are often extremely high. Compared to public assistance programs, negative income tax and basic income programs promote real freedom and are economically more efficient than the former.

It's also possible to design more redistributive and not-Pareto-inferior negative income tax or basic income programs than both types of public assistance programs. Under a more resdistributive NIT or basic income, the low-income and middle-income workers become net beneficiaries and only high-income people become net contributors.

Superficially, the basic income scheme requires a much larger budget than public assistance schemes. However, what ultimately matters is effective taxes, or taxes minus transfers, which are negative for a majority of population and positive only for the rich. Hence, a basic income scheme can be acceptable for most of the population, and the level of basic income can increase easily with popular support unlike public assistance schemes. However, there will be a limit to the sustainable level of basic income, over which reduced work due to income effect will result in reduced GDP and reduced tax revenue that will be insufficient to maintain the level of basic income.

- 2) Basic income as an alternative to traditional social security
- a. Basic income as an alternative to public assistance

Problem of low take-up rates of public assistance programs

b. Basic income as a minimal social insurance for all

Social insurance for income maintenance and consumption smoothing as well as for health care and long-term care should not be replaced by basic income, but reformed to ensure universal coverage.

c. The potential effect of basic income to increase fertility rate and to prevent population extinction in rural areas

While traditional social assistance programs are administered on a household basis and thereby create marriage penalty, discourage family formation and encourage family disintegration, basic income is provided to everyone on an individual basis, and hence creates incentives for marriage and family formation.

While traditional needs-based social assistance programs often provide higher benefits to urban dwellers to help meet their higher costs of living than to rural dwellers, and thereby indirectly support urban migration, basic income is a fixed amount given to everyone regardless of their needs and hence more valuable to rural residents with lower costs of living than to urban residents. Therefore, basic income may encourage rural residents to stay and some urban residents to migrate to rural areas.

3) Basic income to facilitate socioeconomic reforms for enhancing sustainable efficiency

Introduction of carbon tax is necessary to achieve carbon neutrality, but will be faced by public resistance due to increased energy prices. By returning the revenue to the residents through carbon dividends, or carbon basic income, carbon tax will get support from the majority of population.

Introduction of land-holding tax is an effective tool to prevent land speculation and to facilitate efficient use of land, but will be faced by public resistance. By returning the revenue to the residents through land dividends, or land basic income, land-holding tax will get support from the majority of population.

# Ch. 3. Incorporating Negative Income Tax and Universal Earned Income Tax Credit

1) Negative income tax

Negative income tax on an individual basis is equivalent to basic income financed by income tax.

Between a negative income tax scheme and a basic income scheme that have the same distributional consequences, the latter is superior in terms of lower administrative costs and the absence of stigma. However, the former can be perceived to cost less and hence enjoy wider political support although the net costs are the same for both schemes.

Negative income tax on a household basis can be more efficient in terms of poverty alleviation in the short run. However, it creates marriage penalty and will likely create incentives for family disintegration.

Negative income tax plans often provide a quite high level of guaranteed income (often around 50 percent of median household income) with a quite high level of withdrawal rate (often around 50 percent). However, such plans will likely create work disincentives with high participation tax rates and high marginal effective tax rates, particularly when social insurance contributions are added to the withdrawal rate.

Differenciated payments based on age and disability, i.e. higher levels of basic income or guaranteed income are needed. In order to have the same threshold income (break-even point) for both the elderly and non-elderly, the clawback rates should also be higher for the elderly. This can be best achieved by a negative income tax-type basic income with multiple guaranteed incomes and clawback rates and a single excess tax rate (rate of tax for income in excess of the threshold income)

2) Universal Earned Income Tax Credit as a Participation Income

While the refundable earned income tax credit(EITC) is widely recognized as a good antipoverty program for working people, it has shortcomings such as (1) marriage penalty, (2) administrative complexity, (3) some degree of stigma, and (4) disincentives to work when the credit is being phased out.

Burman(2020) and Leff(2020) proposed to modify the earned income tax credit to make it function more like a universal basic income. They propose providing the EITC to every worker with earned income on an individual basis, removing the phase-out of the benefit.

Universal EITC will give more freedom by removing marriage penalty and encourage family formation, strengthen incentives to work especially among low-skilled workers and remove work disincentives at the phase-out region of the EITC, and remove stigma entirely. It is easy to understand for workers and simple to administer for administrators.

Universal EITC can be considered a kind of participation income. A shortcoming is the exclusion of unpaid labor. This could be complemented by local-level provision of a broad range of care work and eco-social services to help those people out of paid work to participate in these activities and to be eligible for complementary participation income.

3) Key issues to consider in policy design and implementation

a. Definition of income:

More comprehensive definition of income than that for existing income tax

- b. Frequency and timing of accounting and benefit payment
- c. The case of household members with no income
- d. Relationship with existing taxes and benefits

# Ch. 4. The Korean Social Security System at a Crossroads

1) Increasing inequality in income and wealth

Korea was hailed as a case of 'growth with equity' until the mid-1990s, but inequality in income and wealth has risen substantially since then.

Old-age poverty in Korea (about 40 percent) is the highest among the OECD countries.

2) Social insurance for income maintenance

While health insurance covers nearly the entire population, social insurance programs for income maintenance such as unemployment insurance and the National Pension suffer from very large blind spots.

Korea's high old-age poverty is due to the low coverage of the National Pension (less then a half of those aged 65 or over) and the low level of the Basic Pension benefit (less than 10 percent of GDP per capita for about 70 percent of the elderly).

Since social insurance programs based on employment relations exclude many non-regular

workers and freelancers as well as the self-employed, there is a call to reform them into earnedincome-based programs.

3) Public assistance

While Korea's poverty rate at 50% of median income is 16.7%, the rate of receiving livelihood benefits for the National Basic Livelihood Security is only 2.4%. Even including housing benefit, education benefit, and medical benefit, the NBLS benefit receipt rate is only 3.6%. Many poor households are not eligible for the means-tested NBLS benefits because of the very high income-conversion rate of property. Some of the poor do not apply for the NBLS benefits to avoid stigma or because of complicated application documents.

The livelihood benefits are to fill the gap between 30% of household median income and the 'recognized income' (the sum of the assessed income and the income conversion of property) of the recipient household. In response to criticism that the incentive to work is lost because the benefit amount decreases as income increases, the government introduced a 30% employee income deduction from 2020, reducing the benefit amount by only 70% of the increased income when employee income increases. It's questionable if the 30% employee income deduction will be sufficient to encourage the livelihood benefit recipients to work in the formal sector to get out of poverty. Many livelihood benefit recipients seem to work in the informal sector not to disclose their earned income.

If they increase their earned income and become ineligible for livelihood benefits, their disposable income often decreases because they lose not only livelihood benefits but also many other public and private benefits that are given to livelihood benefit recipients. Hence, they are often stuck in a poverty trap, with their real freedom to escape from poverty being diminished.

Since the per capita livelihood benefit is larger as the number of household members is smaller, there is an incentive to break up households and a disincentive to form households.

The amount of housing benefits of the NBLS given to renters with their recognized income less than 47% of household median income vary depending on the locations of their residence. The maximum amount of housing benefit for a single person household in 2023 is 330,000 KRW for Seoul residents and 164,000 KRW for rural residents. This kind of needs-based subsidy may reinforce the trend of migration from rural to urban areas and the risk of population extinction in rural areas.

A cliff occurs before and after the selection criteria for housing benefits. Therefore, if the recognized income slightly exceeds 47% of household median income, the disposable income decreases, resulting in an income reversal phenomenon. In such cases, the effective marginal tax rate exceeds 100%.

The EITC is designed even more favorably for single-person households than the NBLS benefits. Single adult households account for 61% of all EITC-receiving households. The phase-out starts at about only 67% of minimum wage, encouraging short-time work. Moreover, the level of recognized income at which the housing benefit ends roughly coincides with the starting point of the EITC phase-out, producing further incentives to reduce labor supply.

The basic pension, albeit at a low level, plays a role in alleviating old-age poverty. It covers 70% of the elderly aged 65 and over based on the recognized income. The full amount of monthly benefit was 307,500 KRW in 2022, about 8.9% of GDP per capita. When elderly couples receive the basic pension at the same time, a 20% reduction for married couples is applied.

4) Income tax

Korea's personal income tax has an eight-step graduated tax rate structure ranging from 6% to 45%, which seems to be very progressive. However, the revenue volume and income redistribution function of the tax is limited by regressive income deduction systems. In particular, employee income deduction is larger for workers with higher employee income, which result in even higher amount of reduced tax for them because both their income deduction (total of 28 trillion won in 2019) is not only much larger than the EITC benefits for the working poor (2019 budget of 4.4 trillion won), but the former benefits are concentrated in the high-income group. Some proponents of basic income used to propose abolishing employee income deduction and replacing it with a universal basic income.

5) High participation tax rates and high marginal effective tax rates that undermine freedom, equality and efficiency

OECD Tax-Benefit Calculator shows that Korea's tax and benefit system often produces very high participation tax rates, discouraging the social assistance recipients from working, and very high marginal effective tax rates, sometimes even exceeding 100% with reversal of net income, discouraging them from working more.



[4-1] Changes in net income according to working hours for a single-parent household with one child *Source*: OECD TaxBEN

Ch. 5. Our Proposal

1) Examination of the major proposals and experiments of basic income and negative income tax

Lee Jae-myung's proposed UBI of 1 million won and additional youth basic income(for those aged 19 to 29) of 1 million won is too modest to be meaningful.

Oh Se-hoon's Safety Income, for which a three-year randomized controlled trial has been launched, could be an effective anti-poverty strategy. However, it may discourage marriage and encourage household disintegration, but the experiment may not be able to detect such effects well. Also, a 50% withdrawal rate will become about 66% or 75% marginal effective tax rate for employees, with 6% or 15% marginal tax rate from the existing income tax and about 10% social insurance contribution rate from employee income. Marginal effective tax rate for the self-employed will become 75% or 84%, because their social insurance contribution rate is about 19% of their income. The high marginal effective tax rates may encourage the beneficiaries to go to informal sector or reduce working.

2) Basic principles and directions for reforming the income security system

Eligibility for basic income is a right for all citizens, based on the obligation to pay taxes.

A new income security system is designed to be fiscally neutral.

The elderly and disabled should be able to lead a minimally decent life with basic income, while sufficient basic income should be provided to parents to prevent child poverty. For adults, excluding the elderly and disabled, we provide a minimum income floor through basic income, and strengthen incentives for productive work through universal EITC, rather than speculative activities.

Public assistance based on means-test should be replaced as much as possible by basic income and universal EITC.

Basic income does not replace earnings-related social insurance programs, but is limited to guaranteeing a minimum income for all.

3) An Integrated Model of Common Wealth Dividends Basic Income, Negative Income Tax-Type Basic Income, and Universal EITC

We propose to start at modest but meaningful levels of basic income(guaranteed income).

a. Common wealth dividends basic income:

The amount of common wealth dividends basic income, which combines land dividend, carbon dividend, and dividends from other sources of common wealth, will vary each year depending on fluctuating tax revenue and fund profits without specifying a fixed amount. In the initial stages, we believe that a common wealth dividends basic income of at least 1.5% of per capita GDP (approximately 600,000 won; GDP per capita in 2021 was 40 million won) is achievable. The common wealth dividends basic income can be treated as a taxable income, with higher-

income individuals being subject to higher tax rates, ensuring that low-income individuals receive greater benefits in practice.

b. Negative income tax-type basic income:

Provide a basic income (guaranteed income) for the elderly and disabled at a level of 15% of per capita GDP(approximately 6,000,000 won), and for the general population including children and adults, at a level of 7.5% of per capita GDP(approximately 3,000,000 won). The threshold income should be approximately 60% of per capita GDP(approximately 2,400,000 won), which corresponds to the average personal income of the entire population. The clawback rate for the elderly and disabled should be 25%, and the general population, it should be 12.5%.



[Figure 5-1] NIT-type basic income payments and basic income tax (unit, % of per capita GDP)

Including the common wealth dividend-based basic income, the elderly and disabled without market income will receive 16.5% of per capita GDP(about 6,600,000 won), and the general population without market income will receive 9% of per capita GDP(about 3,600,000 won) as the floor of their income. In addition to the existing income tax, a tax of 10% on income exceeding the threshold income will be levied as a 'basic income tax', and eliminate personal deductions and child tax credit in the existing income tax, as well as child(parenting) encouragement benefits (the Korean CTC). Fully or partially replace existing public assistance benefits, up to the amount of NIT-type basic income.

#### c. Universal EITC:

The threshold income for universal EITC will be about 60% of per capita GDP (about 24,000,000 won), the same as the threshold income for the negative income tax-type basic income. Provide universal EITC payment of 12.5% of earned income for earned income up to

the threshold income, and payment of about 7.5% of per capita GDP (about 3,000,000 won) for earned income above the threshold income.

Univeral EITC will be financed by eliminating the regressive employee income deductions and employee income tax credits of the existing income tax, and by replacing the work encouragement payment(the Korean EITC).



[Figure 5-2] Universal EITC for individuals with earned income (unit: per capita GDP)



[Figure 5-3] Combined net benefits from NIT-type basic income and universal EITC for individuals with earned income (unit: % of per capita GDP)



[Figure 5-4] Gross total benefits for earned income



<Figure 5-5> Net total benefits for earned income



<Figure 5-6> Gross total benefits for unearned income



<Figure 5-7> Net total benefits for unearned income

# Ch. 6. Financial Feasibility and Expected Effects

1) Financial Feasibility

Confimation of fiscal neutrality of our proposed plan

Possibility of reducing the basic income tax rate (say, from 10% to 5%) and supplementing with other taxes such as increasing VAT, corporate tax, and capital gains tax.

Possibility of saving budget for other expenditures.

2) Equality:

Distributional consequences (changes in effective tax rates), by age, sex, household type, and income class

3) Freedom and Efficiency:

Changes in participation tax rate and marginal effective tax rate, by earned income

- 4) Labor supply effect
- 5) Consumption effect
- 6) Other unmeasurable effects:

Effect on fertility, prevention of population extinction in rural areas, and promotion of active ageing

Effect on real-estate speculation and carbon neutrality

# Ch. 7. Conclusion

Discussion on the political feasibility in the Korean context

-Analysis of data from the Korean General Social Survey in 2018 and 2021: Why did public support for basic income decline ahead of the 2022 presidential election? What are the lessons?

Relevance of our proposal for other countries