

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

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I. Introduction

One: Our capitalist societies are replete with unacceptable inequalities.

Two: Freedom is of paramount importance.

(van Parijs, 1995: 1)

South Korea (simply Korea, hereafter) almost became the first country in the world to implement universal basic income (You and Choi, 2022). In presidential election in March 2022, Lee Jae-myung, the then ruling Democratic Party candidate, pledged to introduce a universal basic income for all citizens. He proposed the introduction of a national basic income (1 million won per year for all citizens; about 2.5% of GDP per capita), a youth basic income (an additional 1 million won per year for those aged 19-29), and a rural basic income (within 1 million won per year for rural residents). He also promised to introduce a land dividend basic income based on land-holding tax and a carbon dividend basic income based on carbon tax through a process of national deliberation. However, this did not happen as he lost to Yoon Seok-yeol of the People Power Party by a narrow margin of 0.7%.

Lee Jae-myung's basic income pledge came under intense attack from his rivals within the Democratic Party during the nomination process. Rather than actively promoting his basic income policy, Lee played defense. During the main election process, he backtracked on his basic income pledge, saying that he might give up on it if the majority of people didn't want it. Several opinion polls conducted in 2020 and early 2021 showed majority support for basic income, but as the presidential election approached, polls conducted in late 2021 and early 2022 showed a significant drop in support for basic income (You and Lee, 2022).

After the presidential election, expectations for the introduction of a basic income in South Korea seem to have waned considerably. However, basic income and its close cousin, negative income tax, are still alive as an important political agenda. Although President Yoon Seok-yeol has expressed a negative perception of basic income, his conservative People Power Party adopted the introduction of basic income as its key policy in 2019. Seoul Mayor Oh Se-hoon, who was re-elected in the June 2022 local elections as a member of the People Power Party, has advocated for a version of negative income tax called "safety income" (Park). He has already launched a randomized controlled trial of the safety income policy with Seoul residents (Park, ;).

Yoo Seung-min, a prominent politician affiliated with the People Power Party, has advocated for a version of negative income tax called "fair income". Shim Sang-jung, the presidential candidate of the progressive Justice Party, also pledged to introduce a version of a negative income tax called "citizen's minimum income guarantee".

Despite losing in the presidential election, Lee Jae-myung has been serving as the representative of the Democratic Party, the leading opposition party, since August 2022. He is presenting a 'basic society' as his vision and is working on devising its contents. A basic society refers to a sustainable society that includes universal basic income, basic housing, finance, education, healthcare, and other basic services that are provided to everyone. It also emphasizes the protection of collective bargaining rights for all disadvantaged individuals in the market, going beyond just workers' rights.

Kim Dong-yeon, a member of the Democratic Party of Korea who was elected as the governor of Gyeonggi-do in the June 2022 local elections, continues to implement the youth basic income and farmer basic income programs and the rural basic income experiment in the province that were initiated by his predecessor, Lee Jae-myung (Reference). However, he is differentiating his policy from Lee's basic income, proposing an "opportunity income" for artists as a version of participation income.

As a result, although both major parties in Korea do not have a consistent stance on basic income, there is a competition among influential politicians for alternatives to the existing income security system under various names such as basic income, safety income, fair income, and opportunity income. Furthermore, the Seoul safety income and the Gyeonggi-do rural basic income policies are being experimented for three to five years, with treatment and control groups. There is a growing interest among intellectuals in basic income and negative income tax as alternatives to the existing income security system. Public interest may also increase depending on the experimental results of safety income and rural basic income.

Basic income has been advocated as a way to realize both freedom and equality without compromising economic efficiency, while negative income tax has been advocated as a way to alleviate poverty while reducing the disincentive to work of existing public assistance programs. Despite their different philosophical backgrounds, basic income and negative income tax can be designed to have the same effects, and in some ways can be considered the same policy.

Nevertheless, significant differences can be found in the basic income and negative income tax policies that have been proposed at home and abroad. First, basic income is based on individual payment, while negative income tax proposals often favor household-based payment. Basic income proposals typically propose a modest level of universal benefit and a low level of universal tax increase, while negative income tax proposals often propose a higher level of guaranteed income and a higher tax rate (clawback rate) for beneficiaries. Basic income proposals generally set the breakeven point at average income or higher, while negative income tax proposals generally set the breakeven point at median income or lower.

This book compares the principles, advantages, and disadvantages of basic income and negative income tax, and explores a comprehensive approach that leverages the advantages of both policies in Korea. We also examine the merits and feasibility of reforming the earned

income tax credit(EITC), a variant of negative income tax, into a universal EITC similar to universal basic income. Based on this, we propose a new income security system that combines universal basic income with a negative income tax and universal EITC. We believe that our proposed reforms will not only promote both freedom and equality but also enhance sustainable efficiency. Sustainable efficiency refers to considering not only short-term economic efficiency but also long-term economic efficiency and ecological sustainability.

In designing a new income security system that promotes freedom, equality, and sustainable efficiency, we present an analytical framework that integrates taxation and benefits(or, public transfers). The effects of basic income, negative income tax, and (universal) EITC on freedom, equality and efficiency can all be analyzed within an integrated framework of tax and benefits. Through theoretical discussions and analysis of empirical data, we will examine not only the income redistribution effects, including poverty alleviation, but also the effects on labor incentives, as well as the long-term economic efficiency and ecological sustainability. It is important to note that we are not designing a new system in a vacuum, but rather building on the existing one and replacing parts of it. We will also consider the fiscal as well as political feasibility of our proposals.

Basic income for freedom, equality, and sustainable efficiency

Basic income is an income that is paid to everyone (universal), without any conditions (unconditional), on an individual basis (rather than on a household basis), and in regular, fixed amounts of cash. Advocated by Thomas More (1516), Thomas Paine (1797), and others, interest and support for basic income today extends far beyond the traditional ideological spectrum of left and right. This is due to its practicality in realizing both freedom and equality and its potential as an alternative social security system that overcomes the limitations of traditional welfare states in addressing growing inequality around the world. We will show why traditional welfare states are ineffective and inefficient in reducing inequality and poverty and why basic income can effectively and efficiently tackle the problem of inequality and poverty and enhance real freedom for all. In addition, we will discuss its potential to help address the socioeconomic crisis caused by the climate change and the demographic crisis of low birthrates and aging.

A basic income promotes "real freedom" by providing a consistent income floor for all. According to van Parijs (1995), real freedom goes beyond "formal freedom" - the absence of coercion or violation of one's rights to self-ownership - to the realization of opportunities, including the material means, to do what one might want to do. A basic income provides the material means essential for substantive freedom in a way that does not compromise formal freedom. Receipt of a basic income is not subject to any means-testing or strings attached, making it truly liberating, unlike means-tested and conditional benefits.

In addition, a basic income provides a constant share of "equal distribution" to everyone, which can be understood as an equal share of part of the national income derived from the common resources and common wealth (collective wealth of a society), such as land, the natural environment, and the knowledge and skills accumulated from the past. Depending on the social

consensus, this could be 5% of national income, or 25% of national income. A basic income promotes equality of opportunity and, at the same time, equality of outcome to a certain extent. Basic income prioritizes equality of opportunity, which is necessary for real freedom, but it also reduces excessive inequality of outcomes, which undermines formal equality of opportunity.

Next, basic income provides a new alternative social security in response to the increasing inability of traditional welfare states to address the growing income and wealth inequality and poverty in their respective countries. Especially in the era of deindustrialization, when the share of the precariat, including precarious low-income workers and the self-employed, is increasing (Standing, 2017), and in anticipation of further job losses and precariousness with the advent of the Fourth Industrial Revolution, the need for a basic income becomes even more important. Basic income can be an effective and efficient alternative to public assistance, which, along with social insurance, comprises the two main pillars of the existing welfare state income security system. Unlike existing means-tested public assistance, which has a stigmatizing effect and requires constant proof of poverty, discouraging people from working and saving and trapping them in a welfare dependency and poverty trap, basic income allows everyone to enjoy real freedom as a basic social right. While traditional public assistance is distributed on a household basis, which can create incentives to break up households and marginalize household members if it is not distributed properly among them, basic income is distributed equally to individuals, freeing them from these problems. Unlike public assistance, which encourages people to hide their income or not work or work in the informal sector because their benefits are reduced as they earn additional income, basic income does not harm economic efficiency because it encourages people to work in the formal sector.

There are three general conceptions of distributive justice: desert, need, and equality (Miller, 1992). The principle of desert indicates that people deserve reward according to their contributions. The capitalist market economy is a system of mechanisms that rewards people according to their contributions to social output. However, it is impossible to accurately measure each person's contribution, and no market system can accurately distribute it. For example, in South Korea, according to the 2018 withholding of business income tax data, the top 1% of singers earned an average of 3.47 billion won, and the average for the top 10% is 600 million won. However, the average income of the bottom 90% of singers was only 4.8 million won (You, 2021). How can we judge whether these differences in earned income of singers correctly reflect their contributions? Can we say that unpaid labor such as housework or care work has zero share of social contribution? From these examples, we can see that distributive justice is not satisfied by the principle of desert alone.

Public assistance is a system that provides assistance to people who are on the margins of the capitalist market economy, such as the poor and disabled, who are unable to meet their basic needs through the principle of desert. The problem is the negative effects of means-testing to identify those in need. Stigmatizing effects, destruction of freedom and dignity, disincentives to work and poverty traps, low take-up rates, and administrative costs. It produces two types of error, i.e. inclusion of undeserving poor and exclusion of deserving poor. Therefore, means-tested public assistance as a means of correcting market distribution should be a last resort. Once

we recognize the fundamental impossibility of accurately measuring individual contributions and needs, we can accept that the principles of desert and need alone cannot satisfy distributive justice, and that some portion of social production should be distributed equally to all.

It would be ideal to distribute a certain portion of social production as a basic income to all, based on the principle of equality, so that everyone can meet the minimum basic needs and so that no one needs public assistance. However, this will require a high level of basic income that can completely replace public assistance, which may not be financially feasible. Even if a low level of basic income were introduced, which could partially replace public assistance and reduce the number of public assistance recipients and the amount of public assistance they receive, their practical freedom would be expanded and the problems of stigma and disincentives to work would be reduced.

Next, basic income is emerging as an alternative income security system as social insurance becomes increasingly irrelevant in the changing labor market of the 21st century. Social insurance has traditionally been based on the employment relationship, with premiums shared by workers and employers, and designed to protect male breadwinners in the event of income loss due to illness, work injury, unemployment, or old age. However, with the decline of the male breadwinner model based on the standard employment relationship of the industrial capitalism and the rise of deindustrialization and precarious workforces, social insurance has created increasingly large blind spots. As a result, those most in need of protection, such as precariously employed workers and the micro-entrepreneurs, are left unprotected or only weakly protected. A universal basic income could be considered a primary social insurance that provides a minimum level of protection even to those who are excluded from the protection of existing social insurance programs.

Imagine, as in John Rawls' thought experiment, that we choose the principle of distribution under a veil of ignorance, where we have no idea what physical condition or social position we will find ourselves in from our original position (Rawls, 1971). It is conceivable that people who do not know whether they will become disabled or incapacitated would choose to distribute at least some portion of social output as a basic income based on the principle of equality, rather than to base all distribution on the principle of desert/contributions alone (capitalism) or on the principle of desert and need alone (welfare capitalism). If those people in the original position are risk-averse, they will prefer a high level of basic income that requires equal distribution of a considerable portion of national income, but they will not choose too high a level which will hinder economic growth so that the size of basic income will shrink over time. Van Parijs argues that implementing the highest sustainable level of basic income is consistent with the Rawlsian "difference principle," which is to maximize the benefits to the least advantaged (van Parijs, 1995).

Basic income is not only an alternative income security system that overcomes the limitations of the existing welfare state, but also a valid tool for realizing the socioeconomic reform challenges facing our society. Basic income can be a means to facilitate the introduction of a land value tax, which is necessary to reduce the concentration of land ownership, and a carbon tax, which is the most effective means to achieve carbon neutrality in response to the climate

crisis. This point has been highlighted by presidential candidate Lee Jae-myung's proposal of a land value tax and a carbon tax to finance a universal basic income (Kang, 2022; Standing, 2022; You and Choi, 2022). While the introduction of a land value tax would contribute to alleviating land ownership concentration and real estate speculation, promoting the efficient use of land, and reducing excessively high land prices, it is difficult to overcome political opposition from landowners. However, the implementation of a land dividend basic income that distributes land value tax revenues to all citizens at $1/n$ could win the support of the large number of citizens who own no or little land by making them net beneficiaries. In addition, a flat tax or a mildly progressive tax on land, rather than a punitive tax on housing, especially for owners of multiple houses, such as the comprehensive real estate tax under the Moon Jae-in administration, would minimize the backlash from landowners. Similarly, if a carbon tax is introduced, the burden on households increases due to rise in energy prices, a carbon dividend basic income policy that distributes all or a significant portion of carbon tax revenues at $1/n$ can create a large number of net beneficiaries and secure political support (Economists' statement, 2019).

Furthermore, a basic income could help overcome the demographic crisis of population decline and rural extinction caused by extreme low birthrates and urban migration. South Korea's total fertility rate fell to 0.78 in 2022, the lowest in the OECD and only about one third of the 2.1 needed to reproduce the population. The urbanization of the population has pushed rural areas to the brink of extinction due to depopulation. Unlike public assistance, which gives incentives to break up households, basic income has the effect of promoting household formation and expansion, and can contribute to higher marriage and fertility rates by providing income security for young people. Unlike existing need-based social security benefits, which provide lower benefits to rural residents than urban residents (e.g., the National Basic Livelihood Security Housing Benefit, where the maximum per capita benefit is 330,000 won in Seoul and 164,000 won in rural areas), basic income provides a fixed amount to everyone. By providing a higher utility to residents of regions with relatively low living costs, such as housing, basic income can ease the urbanization of the population and prevent the extinction of rural municipalities. If the national basic income is delayed or started at a very low level, this effect can be strengthened by providing additional rural basic income to rural residents (You & Choi, 2022).

Negative income tax for effective poverty alleviation

A negative income tax (NIT) refers to the payment of a negative tax, or cash benefit, by the state to low-income earners below a certain income threshold. In other words, the government imposes a positive tax to those earning above the threshold, but pays a negative tax to those below the threshold, rather than simply exempting them from paying taxes. It's like a refundable tax credit: the lower the market income, the larger the negative tax, or cash benefit.

The NIT has gained traction beyond the ideological spectrum on the left and right since neoliberal economist Milton Friedman proposed it as an efficient alternative to existing welfare programs for poverty alleviation in his 1962 book *Capitalism and Freedom*. Friedman (1962,

1966) emphasized that an NIT could eliminate the inefficiencies of the existing welfare state and reduce overly bloated welfare budgets. Many liberal economists also advocated for an NIT, including James Tobin, who emphasized that it could be a progressive alternative by eliminating not only the inefficiencies but also the large blind spots of existing social welfare (Tobin et al., 1967). In early 1968, 1,200 economists signed a statement calling for the adoption of an NIT. The Rev. Dr. Martin Luther King Jr. also called for a NIT, or a guaranteed minimum income, before his assassination. In 1969, Republican President Richard Nixon proposed an NIT-type Family Assistance Plan. Nixon's proposal passed the House of Representatives in 1970 but failed to cross the Senate threshold.

The U.S. government conducted large-scale policy experiments on NITs starting from 1968, and neighboring Canada also experimented with NITs. The results of these randomized controlled experiments could have revived the debate about NITs, but the political debate about NITs lost momentum when the results were interpreted negatively.

With respect to work incentives, Friedman and other economists have emphasized that NITs are less disincentivizing than traditional public assistance. This is because public assistance typically reduces benefits by a dollar for every dollar of additional earned income (i.e., a marginal tax rate of 100%), so there is no incentive to work at all, whereas an NIT only reduces benefits by a fraction of dollar (e.g., 50%) for every dollar of additional earned income, so there is an incentive to work. However, the working poor who were previously not on the welfare rolls would have less of an incentive to work under a NIT, as it would cut around 50% of their earned income. In microeconomic terms, this is equivalent to a reduction in wages of around 50%, resulting in a substitution effect as the utility of labor relative to leisure decreases. In addition, as household income increases, labor participation may decrease due to an income effect.

The results of the experiments in the United States in the 1970s showed that the primary earner, the breadwinner of the family, hardly reduced their working hours, but the secondary earner reduced their working hours significantly. While this could be interpreted as a positive phenomenon, as they were able to take care of their children and elderly, it was highlighted negatively at the time as a decline in labour force participation due to reduced incentives to work (Widerquist,).

Ultimately, the U.S. Congress rejected Nixon's Family Assistance Plan, a negative income tax policy, but instead introduced a variant of a negative income tax, the earned income tax credit (EITC), in 1975. The EITC is a type of negative income tax in that it provides subsidies to low-income workers. However, unlike a negative income tax, under the EITC, benefits are zero at zero earnings and increase as earnings increase, up to a certain point, to incentivize low-earning workers to work.

Although negative income tax has not been fully adopted in the United States or elsewhere, the study and discussion of negative income tax proposals in academia and politics has been influential in the introduction and spread of workfare taxes, as well as the reform of social security systems in Canada and other countries. New Zealand is perhaps the most prominent example of a welfare state redesign based on the principles of a negative income tax (Myles and

Pierson, 1997). Notably, the negative income tax debate has overlapped with the basic income debate, sparking discussions about the possibility of introducing a basic income in the form of a negative income tax, or a negative income tax in the form of a basic income. James Tobin proposed a negative income tax as a way to implement a universal basic income, but with additional taxation on all other income (Tobin et al., 1967). In the 1972 presidential election, Democratic candidate George McGovern also proposed a negative income tax in the form of a basic income of \$1,000 per year for all Americans, following James Tobin's recommendations. Milton Friedman also wrote that "a basic income, when combined with a positive income tax with no tax exemptions, is another way of introducing a negative income tax" (Suplicy and Friedman, 2000).

Similarities and differences between basic income and negative income tax

Basic income is universal by definition. Along with unconditionality, universality is a key element in the definition of basic income. While negative income tax can be seen as a violation of the universality of basic income in that it distinguishes between those who receive benefits and those who pay taxes, it can also be seen as effectively the same as a combination of universal basic income and universal taxation. Philippe van Pareis expects that it will be realistically difficult to introduce a generous level of universal basic income at once, and that the introduction of universal basic income can be realized through a detour such as participation income or negative income tax (Van Parijs and Vanderborght, 2017: 214). However, Guy Standing has a negative view of negative income taxes. While he acknowledges its usefulness as a poverty alleviation device, he notes that it does not increase republican freedom or ensure economic stability, and that it may encourage moral hazard by providing incentives to underreport income (Standing, 2017: 212).

Why are there such different assessments of basic income and negative income tax? This is because the two policies can have the same income redistribution effect as a result, and they can be designed to produce different results. It is also due to the difference in the actual execution method of the two policies, and the difference in the background and main purpose of the two policies.

<Table 0-1 shows a hypothetical economy with 11 people. People have market incomes ranging from \$0 to \$100,000, with an average income of \$50,000. This is the same as the case presented by Mankiw (2016).

<Table 0-1> Basic income and negative income tax

Market State (Mean income=50,000)	Basic Income (Basic income=10,000, Tax rate=20%)	Negative Income Tax (Guaranteed income=10,000, Break-even income=50,000, Withdrawal rate=Tax rate=20%)
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People	Market income	Basic income	Tax	Disposable income	NIT payment	Tax	Disposable income
Person 0	0	10,000	0	10,000	10,000		10,000
Person 1	10,000	10,000	2,000	18,000	8,000		18,000
Person 2	20,000	10,000	4,000	26,000	6,000		26,000
Person 3	30,000	10,000	6,000	34,000	4,000		34,000
Person 4	40,000	10,000	8,000	42,000	2,000		42,000
Person 5	50,000	10,000	10,000	50,000	0		50,000
Person 6	60,000	10,000	12,000	58,000		2,000	58,000
Person 7	70,000	10,000	14,000	66,000		4,000	66,000
Person 8	80,000	10,000	16,000	74,000		6,000	74,000
Person 9	90,000	10,000	18,000	82,000		8,000	82,000
Person 10	100,000	10,000	20,000	90,000		10,000	90,000
Total	550,000	110,000	110,000	550,000	30,000	30,000	550,000

First, let's look at the basic income policy that pays everyone an income of \$10,000. The amount needed to pay 11 people is \$110,000. This can be raised by taxing everyone's market income at a rate of 20%. People's disposable income is their market income plus the basic income minus the tax.

Next, let's look at a negative income tax with a threshold(breakeven) income of \$50,000 and a payment of \$10,000 minus 20% of market income for those below the threshold (guaranteed income = \$10,000, clawback rate = 20%), while those above the threshold are taxed at a 20% rate on market income above the threshold. For example, Person 2, who has a market income of \$20,000, would receive $\$10,000 - \$20,000 * 0.2 = \$6,000$, resulting in a disposable income of $\$20,000 + \$6,000 = \$26,000$. This is the same result as if you received a basic income of \$10,000 and paid \$4,000 in tax, which is 20% of your income. Person 7, with a market income of \$70,000, would pay \$4,000 in tax, which is 20% of the \$20,000 market income over the \$50,000 threshold, resulting in a disposable income of \$66,000. This is the same result as receiving a basic income of \$10,000 and paying \$14,000 in tax, or 20% of market income.

Under the two seemingly very different policies, everyone's disposable income is exactly the same. Gregory Mankiw notes that basic income and negative income tax have the same outcome. He points out that when analyzing a policy, both the money paid (taxes) and the money received (benefits) should be considered simultaneously, and that many academic papers and news articles draw incomplete or erroneous conclusions by considering taxes and benefits separately. A common misconception is that a basic income would have no redistributive effect because everyone would receive the same amount, and that a policy of differential payment through means

testing, such as a negative income tax, would be more progressive (Mankiw, 2021). He also points out that a basic income is easier to implement administratively than a negative income tax, which requires an income test. In addition, unlike negative income tax, basic income has the advantage of not having a stigma effect because it does not distinguish between those who pay taxes and those who receive benefits.

However, there is a downside to basic income. In the example above, the cost of a negative income tax is \$30,000, while the cost of a basic income is \$110,000. The result is the same policy, but basic income has the disadvantage of appearing to be more costly. The rich pay much more in taxes than they receive in basic income, but those who do not understand this mechanism often question why the rich should be given basic income.

While basic income and negative income tax can be designed to have the same redistributive effect, as in the example above, in many cases they are designed quite differently. In the example above, basic income is funded solely by income tax, and both basic income and negative income tax have a single tax rate of 20%. However, most negative income tax proposals have a relatively high guaranteed income and a high marginal tax rate (clawback rate) of around 50% for those receiving benefits.

In addition, the breakeven income threshold is often set differently. In basic income, the threshold is usually average income or above, whereas in negative income tax, the threshold is usually median income or below. Also, by definition, basic income is paid on an individual basis, whereas many proposals for negative income tax are designed on a household basis. Negative income tax is also different from basic income based on resources other than income tax, as in Alaska, where a portion of the fund created from oil revenue is distributed to all residents at a rate of $1/n$.

These differences in the design of basic income and negative income tax are due to differences in the background and main objectives of the two policies. Since basic income is based on everyone's equal right to common wealth (Ranalli, 2021) and seeks to promote everyone's real freedom (Van Parijs, 1995), it is based on individual payment in principle. However, since negative income tax aims to alleviate poverty, it is often paid at the household level rather than the individual level. This is because children or spouses of rich people cannot be considered poor even if they do not have personal income.

The differences in benefit level and breakeven income is also due to the difference in the main purpose of promoting real freedom versus alleviating poverty. Basic Income is based on the principle of equally distributing a certain portion of the national income to everyone as $1/n$, considering it as the profit of the commonwealth. As a simple way to realize this, a basic income based on a flat rate income tax was proposed early on. If 100% of basic income is financed by a single rate income tax, the threshold income would be the average income. Benefit levels and tax rates are determined by what percentage of national income is shared equally. If a progressive income tax finances the basic income, even those with higher-than-average incomes can be net beneficiaries. Therefore, in societies where income is concentrated at the top, a basic income based on a flat income tax or a progressive income tax can be effective in reducing income inequality.

As in the case presented by Mankiw earlier, even in a negative income tax that applies the same tax rate to those below and above the threshold income, the average income becomes the threshold income. If such a NIT is implemented on an individual basis, the result is the same as basic income. If it is implemented on a household basis, the household-level average income becomes the threshold income. However, most negative income tax proposals set the threshold below median income, whether at the individual or household level.

Average income is generally higher than median income. This is because a small number of rich people push up the average. Under a basic income, average income would be the threshold income, so more than half of the population would be net beneficiaries. Median income divides the population into equal halves below and above. Because average income is higher than median income, there are more people below average income than above it. However, negative income tax is aimed at helping the poor, so even if the threshold is set high, it does not exceed the median income. Therefore, the net beneficiaries are half or less of the population.

Reflecting that the most common definition of relative poverty is less than 50% of median income based on household equivalized income, generous models of negative income tax set the guaranteed income at 50% of median income and the threshold income at median income. Accordingly, the clawback rate (equivalent to marginal tax rate) automatically becomes 50%.

The tax rate on income above the threshold is usually much lower than 50%. Therefore, in a negative income tax, the marginal tax rate below the threshold is usually higher than the rate applied above the threshold. The higher the guaranteed income to those with no income, the higher the marginal tax rate below the threshold will be than the rate above the threshold.

A negative income tax that provides such a high level of guaranteed income would impose a high marginal tax rate on low-income individuals, which would have less of a disincentive to work than traditional public assistance, which has a marginal tax rate of 100%, but could have a significant disincentive to work for non-recipients of traditional public assistance. In this respect, a negative income tax contrasts with the earned income tax credit (EITC), which applies a negative or zero marginal tax rate for low-income workers to encourage them to work.

In summary, an individual-level negative income tax that equalizes the tax rate for income exceeding the threshold income with the withdrawal rate for the amount of negative income tax payment below the threshold income, is equivalent to a basic income based on a single income tax rate. In this case, not only the amount of basic income and the amount of guaranteed negative income tax payment are the same, but the threshold income is the average individual income, and those with below-average incomes become net beneficiaries, and those with above-average incomes become net burden bearers.

However, most negative income tax proposals take a household-level payment and increase the level of guaranteed income while simultaneously increasing the clawback rate, setting the threshold at or below the median income, with the tax rate on income above the threshold being lower than the clawback rate on the negative income tax payment. A basic income may be favorable if the focus is on promoting real freedom and reducing inequality, while a negative income tax may be favorable if the focus is on reducing poverty. It is important to note, however, that a negative income tax with an excessively high clawback rate may be effective in reducing

poverty in the short run, but not in the long run, by limiting real freedom, reducing incentives to work, creating economic inefficiencies, and encouraging household dissolution.

An Integrated Model of Basic Income and Negative Income Tax: Negative Income Tax-Type Basic Income

There have been proposals to implement basic income as a negative income tax and proposals to implement negative income tax as a basic income. Proposals to implement basic income as a negative income tax are based on the assumption that framing it as a negative income tax may be easier to garner majority support. On the other hand, proposals to implement the negative income tax as a basic income method are based on administrative expediency. It is administratively cumbersome and costly to conduct frequent income tests to determine the eligible recipients and the amounts of the NIT benefit payment, so it is administratively easier to take the basic income method by giving everyone a certain amount of money and then refunding it through tax administration.

Professor Mankiw asked Harvard undergraduates about their preferences for a negative income tax plan, which would provide more support for low-income people and tax income above a certain threshold, versus a basic income plan, which would provide a certain amount of income for everyone, regardless of income level, but tax all income. Mankiw found that 90 percent of students chose the negative income tax option, despite the fact that the two schemes he illustrated had the same redistributive effect (Mankiw, 2021). While Mankiw points out that both policies produce the same result, with a basic income being administratively easier and less costly, it shows that in terms of political feasibility, it may be better to frame it as a negative income tax in order to gain support from the general public.

In fact, the debate over basic income in Korea's last presidential election was dominated by opposition based on traditional notions of need-based social welfare, along with fears that a large tax increase would be necessary to fund the program. The argument that basic income is a waste of precious resources on people who don't need help, and that it places a disproportionate tax burden on high-income earners, has been quite persuasive. Many people accepted the erroneous explanation that "basic income does not have a redistributive effect because it gives everyone the same amount of money, regardless of whether they are low-income or high-income". Many people didn't immediately understand that the same amount of money would be a relatively large sum of money for low-income people. Therefore, in order to increase the political feasibility of basic income, it may be a useful strategy to propose a negative income tax that has the same redistributive effect as the basic income you want to introduce at an early stage.

The negative income tax approach is also easier to explain when the level of the basic income is differentiated by age and disability. It would be possible to provide the same amount of basic income to all citizens, without distinguishing between children, adults, and seniors, and without distinguishing between people with disabilities and people without disabilities. However, there have been many proposals to provide a higher level of basic income to the elderly and disabled and a lower level of basic income to children than to adults. In general, differentiated basic income

payments based on age and disability are not considered to violate the universality principle of basic income. It can be seen as reflecting the principle of need alongside the principle of equal rights, and it can also be seen as reflecting the principle of universal insurance, since everyone goes through childhood, adulthood, and old age, and everyone is at risk of disability.

However, applying the same income tax rate to everyone in these cases leads to the problem of different threshold income. For example, if the elderly and disabled receive twice as much basic income as the general population, and the tax rate (clawback rate) is the same, the threshold income for the elderly and the disabled becomes twice as high as that for the general population. This creates a problem that some high-income seniors and disabled people become net beneficiaries.

Therefore, when setting different levels of basic income (guaranteed income) according to age or disability, it is desirable to apply different clawback rates to unify the threshold income. A positive income tax on income exceeding the threshold income would not need to be differentiated by age or disability. To have multiple basic income (guaranteed income) amounts and multiple tax rates (clawback rates) for income below the threshold income, it is more natural to frame it as a negative income tax. We will call this an integrated model of basic income and negative income tax, or negative income tax-type basic income.

There are important considerations to be taken into account when designing an integrated model of basic income and negative income tax. While negative income tax is often designed at the household level, we should design it at the individual level, consistent with the principles of basic income. A basic income or a negative income tax at the individual level would increase the real freedom of individuals and would not create incentives for household dissolution, but rather for household formation. However, from a poverty reduction perspective, a household-level negative income tax may be more efficient, at least in the short term (i.e., without considering the long-term effects of household dissolution or disincentives to work). People familiar with traditional needs-based welfare principles will favor a household-level negative income tax over an individual-level one, so it is important to explain the advantages of an individual-level basic income or negative income tax. In particular, it is important to emphasize the superiority of individual rather than household-level income security policies in addressing the demographic crisis of low birth rates.

Nevertheless, it could be argued that many of the non-earners, such as children, stay-at-home moms, and students, live in wealthy households, and it would be unfair to support them with the taxes of hard-working middle- and upper-income earners. However, since there is a high-income earner in a wealthy household who is a net contributor, the household as a whole would be a net-contributing household if the amount of negative income tax payments received by the household were combined with the taxes paid by the high-income earner. Therefore, it is not unfair for the economically inactive members of a wealthy household to be net beneficiaries on an individual basis.

To make this clear, it would be necessary to calculate the benefits or taxes of a NIT-type basic income on an individual basis, but for children, stay-at-home moms, students, etc. with no income, the head of the household filing income taxes would have to claim them as dependents and settle

the refund or additional tax liability by offsetting the amount they would receive from the NIT-type basic income against the taxes they would pay. This way, it would be easier for people to understand that middle-class working people are not supporting the non-income members of rich families.

More fundamentally, we need to make it clear that everyone has the right to a (NIT-type) basic income, but that this right is based on the obligation to pay taxes. Free-riding can be prevented by ensuring that all earners cannot receive the basic income without filing an income tax return, and that only the economically inactive population can be registered as dependents of the household head and receive payments through the household head's income tax return.

In addition to a NIT-type basic income, we can also envision a basic income based on sources other than income tax. For example, a land dividend basic income funded by land holding tax revenue and a carbon dividend basic income funded by carbon tax. We can also establish a commonwealth fund by reclaiming development gains from the state's land development and social overhead capital investment, as well as profits from R&D-supported companies, and distribute $1/n$ of the fund's revenue to all citizens. This can be called a commonwealth dividend basic income to distinguish it from a negative income tax-type basic income.

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

The most important decisions to make when designing a negative income tax-type basic income are the amount of the basic or guaranteed income, the threshold income or breakeven point, and the clawback rate below the threshold and the tax rate above the threshold. These variables are interrelated and there are trade-offs among them. The higher the level of the basic (guaranteed) income, the higher the clawback rate (tax rate) and/or the lower the threshold income. In order to lower the clawback rate (tax rate), the basic (guaranteed) income level must be lowered, as there is a limit to how much the threshold income can be raised above the average income.

To alleviate poverty, it would be desirable to set the basic (guaranteed) income at a high level above the poverty line (50% of median income). However, to avoid creating a fiscal deficit, the higher the level of basic (guaranteed) income, the higher the tax rates both below and above the threshold should be.

For example, if the threshold income is set at the average income, a 20% flat tax rate is required to provide a basic income of 20% of the average income, and a 30% flat tax rate required to provide a basic income of 30% of the average income. If the threshold income is set at or below the median income, a higher clawback rate is required to provide the same level of basic income. If the threshold income is set at the median income, but the guaranteed income is 30% of the median income (rather than the average income), a 30% clawback rate is required, but the tax rate on income exceeding the median income can be lower than 30%.

However, it is important to note that we are not designing a new policy in a vacuum. We need to decide whether to maintain the existing income tax and social insurance contribution system,

adding a negative income tax below the threshold and an additional income tax above the threshold, or to completely overhaul the income tax system by integrating the existing taxes and a negative income tax.

We also need to decide whether to maintain the existing social security benefits or fully or partially replace them. It is important to consider how the actual benefits and burdens change depending on the relationship with the existing system. Of particular importance are the effective tax rate, participation tax rate, and effective marginal tax rate.

The effective tax rate is distinguished from the nominal tax rate and takes into account not only the positive taxes such as income tax and social security contributions but also the negative taxes such as public transfers. If the amount of money that you receive in public transfers is greater than the amount of money that you pay in taxes and social security contributions, your effective tax rate is negative.

A negative income tax aims to alleviate poverty by making the effective tax rate for low-income earners negative so that their disposable income (market income + public transfers - taxes and social security contributions) is greater than their market income. A negative effective tax rate in the lower income brackets and a higher positive effective tax rate in the higher income brackets means a progressive income redistribution. Therefore, the progressivity of the effective tax rate is important from an income redistribution perspective. The more progressive the effective tax rate, the greater the redistributive effect. It is possible that the nominal tax rate is progressive but the effective tax rate is not.

The participation tax rate is the proportion of earned income that goes to taxes, social security contributions, and reductions in public transfers when someone who was not participating in the labor market starts participating. The higher the participation tax rate, the lower the incentive to participate in the labor market. People may choose to completely avoid working or work in the informal sector to avoid income exposure.

The effective marginal tax rate is the ratio of the increase in taxes and social insurance contributions and reduced public transfers to a small increase in income due to an increase in hours worked or a rise in wages. The higher the effective marginal tax rate, the less incentive there is to increase your income by working more. High participation and effective marginal tax rates not only have a negative impact on economic efficiency by reducing the incentive to work, but they can also be seen as limiting real freedom by constraining the choice to work and escape poverty.

In analyzing the problems of the existing income security system and designing alternative policies, we will focus on the effective tax rate, participation tax rate, and effective marginal tax rate. Under the current system, we will analyze the effective tax rate, participation rate, and effective marginal tax rate by income group, household type, and public benefit recipients and non-recipients, and seek to strengthen the progressivity of the effective tax rate overall, while reducing the participation rate and effective threshold tax rate where they are excessively high. The analysis of policy effects will also focus on changes in effective tax rates, participation rates, and effective marginal tax rates.

The definition of income and the frequency of income calculations and payments are also

important considerations when designing a policy. In general, the concept of income used in tax administration is quite narrow. When introducing basic income or negative income tax, a more comprehensive definition of income should be applied. In principle, it is necessary to use a comprehensive concept of income that includes non-taxable income and capital gains, as well as imputed rents, but there are challenges in how to implement it administratively. Depending on the definition of income, the analysis of income distribution, including median and average income, and the calculation of effective tax rates, participation tax rates, and effective marginal tax rates, can vary. The frequency of income calculations and payments, whether monthly or annually, can also have a significant impact on policy effects and administrative burdens.

When designing policies, it is also important to carefully consider what data will be used and how the policy can be implemented administratively. In general, there is a significant difference between the income distribution captured by household survey data and that captured by administrative data. Therefore, if you design policies based on household survey data, you may find significant discrepancies between predictions and realities when implementing them. We will conduct detailed reviews of these technical issues in the following chapters.

The Desirability of Introducing Universal EITC

In existing public assistance programs, the participation tax rate and effective marginal tax rate for low-income individuals can reach or even exceed 100%. As income increases, not only do the benefits decrease or the eligibility for benefits disappear, but the recipients also lose other benefits provided by the public and private sectors. Although the marginal tax rate (clawback rate) in negative income tax is set lower than in traditional public assistance programs, a quite high rate is still necessary if the guaranteed income level is set high in order to replace traditional public assistance programs altogether. Combined with the existing income tax and social security contributions, this can result in very high effective marginal tax rates and participation tax rates.

In contrast, the earned income tax credit (EITC) aims to incentivize work by providing low-income earners with a negative or zero marginal tax rate. Under negative income tax, the smaller the market earnings, the larger the benefit, whereas under an EITC system, the benefit is zero at zero earnings and increases as earnings increase up to a certain level. This is called the phase-in range (marginal tax rate < 0). After that, the benefit remains constant until a certain income level, which is called the plateau range (marginal tax rate $= 0$). Beyond that point, the benefit decreases as income increases, and individuals above a certain income level lose eligibility for the EITC benefit. This is called the phase-out range (marginal tax rate > 0). The EITC benefits for those who fall below a certain level of earned income can be considered a type of refundable tax credit. However, unlike traditional refundable tax credits, benefits increase as earned income increases up to a certain level. Although proposals have been made to implement both individual-based and household-based negative income tax systems, the EITC is operating on a household basis. When the EITC was first introduced in the United States, it received little attention as it started at a very

low level. However, the EITC has expanded over the years, and since 1996, it has become the largest public assistance program in the United States, as its benefit levels and beneficiaries have increased. The EITC program has also spread to countries such as Canada, the United Kingdom, and Sweden, as well as Korea, where the EITC system was introduced in 2008 and significantly expanded under the Moon Jae-in government. The rapid expansion and development of in-work subsidy systems in various countries, including the United States, over the past decades can be attributed to their ability to enjoy widespread political support due to their effects of promoting labor incentives and alleviating poverty, as well as effectively providing subsidies to both employees and employers. However, the EITC system is criticized for its complex structure, as it consists of phase-in, plateau, and phase-out ranges, making it difficult for people to understand. It is also operated on a household basis, which can lead to incentives for household dissolution. In Korea, where income tax is levied on an individual basis, while the EITC is executed on a household basis, the impact of the EITC on participation tax rates and effective marginal tax rates varies depending on an individual's income, household income and assets, and household composition. This complexity makes it difficult for the general public to understand. The EITC is more favorable to households with fewer members, so the share of single-person households in the total number of recipients has continued to grow, exceeding 70 percent. In addition, the EITC increases the effective marginal tax rate in the phase-out region, undermining work incentives.

Recently, there have been proposals in the United States to eliminate the phase-out range of the EITC and reform it into a universal EITC system operated on an individual basis (Burman, 2020; Leff, 2020). The proposal aims to make the in-work subsidy system similar to a basic income. The idea is to remove the incentives for household dissolution by operating it on an individual basis, and to solve the problem of decreasing work incentives in the phase-out range. Under this system, a certain percentage of earned income will be paid up to a certain threshold of earned income, beyond which the benefit amount will not increase and remain the same.

We believe that it is desirable to introduce universal EITC alongside the negative income tax-type basic income. As the level of basic income (guaranteed income) increases, the clawback rate (marginal tax rate) needs to be increased. However, if the existing taxes, social insurance premiums, and reduction of existing public transfer benefits are taken into account, the participation tax rate, as well as the effective marginal tax rate, may become too high. The universal EITC has only a phase-in range (marginal tax rate < 0) and a plateau range (marginal tax rate $= 0$), which reduces the effective tax rate, as well as the participation tax rate and effective marginal tax rate, for low-income workers. In Korea, instead of the term "earned income tax credit," the term "labor incentive payment" has been used, so we will refer to it as the universal labor incentive payment in Korean (But we will stick to the term "universal EITC" in English).

Universal EITC can be considered as a form of participation income. It could be designed to support not only paid work but also socially meaningful volunteer activities and unpaid caregiving work, among others, by setting certain criteria. When providing a relatively lower level of basic income (guaranteed income) for the general population, compared to the elderly and disabled, universal EITC can complement this arrangement. It can overcome the argument that basic

income allows free riding for those who do not work.

By combining negative income tax-based basic income and universal EITC, it is possible to apply a relatively high effective marginal tax rate based on market income (including labor income, capital income, and capital gains), while reducing the effective marginal tax rate for labor income. This can achieve both poverty alleviation and labor incentive effects. It can also have the effect of promoting productive work rather than speculative investments in real estate or cryptocurrencies. The introduction of universal EITC is significant in terms of fair taxation, as the existing income tax system often has loopholes or applies lower tax rates to income from capital than labor income. In addition, many low-income and precarious workers fall into the blind spots of social insurance such as national pension or employment insurance, and the universal EITC can contribute to closing the social insurance blind spots by indirectly supporting social insurance contributions.

Our Proposal

We propose an alternative system of social security that combines basic income, negative income tax, and universal EITC, pursuing freedom, equality, and sustainable efficiency. Our proposal does not provide a high level of basic income or guaranteed income on a household basis in order to achieve short-term poverty reduction, imposing high participation and effective marginal tax rates. This is because high tax rates can restrict the real freedom of recipients and increase the risk of trapping them in poverty by diminishing their motivation to work. In order to effectively alleviate income inequality and poverty while promoting real freedom of individuals, we adhere to the principle of providing basic income on an individual, rather than household, basis. For low-income earners, we provide a minimum income floor through negative effective tax rates, while ensuring that participation and effective marginal tax rates are not excessively high. We aim to alleviate inequality and poverty by enhancing the progressivity of effective tax rates, and make those below the median income or average income net beneficiaries, without imposing excessively high effective tax rates and effective marginal tax rates on high-income earners.

Basic principles and directions for reforming the income security system:

1. The introduction of a new income security system is designed to be fiscally neutral. It will not generate fiscal deficits.
2. Two types of basic income will be introduced: commonwealth dividend-type and negative income tax-type. Eligibility for basic income is a right for all citizens, based on the obligation to pay taxes. In addition, universal earned income tax credit will be introduced for all working people.
3. 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.

4. Public assistance based on means-test should be replaced as much as possible by basic income and universal EITC, and public assistance should function as a last resort safety net.

5. Basic income does not replace earnings-related social insurance programs, but is limited to guaranteeing a minimum income for all. Contribution-based social insurance such as public pensions and unemployment insurance should automatically enroll all adults to eliminate blind spots, and universal EITC should help low-income workers to cover social insurance contributions.

Immediately executable policies:

1. Common wealth dividends basic income:

Introduce a land holding tax to replace the existing comprehensive real estate tax, and implement land dividend basic income with the increased tax revenue. To achieve carbon neutrality in response to the climate crisis, establish a carbon tax and implement carbon dividend basic income using the carbon tax revenue. Additionally, form a 'common wealth fund' with the profits from land development and social overhead capital investment by the government, and R&D-supported companies, and distribute the fund's profits equally to the entire population. 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 660,000 won annually as of 2023) 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.

2. 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, and for the general population including children and adults, provide a basic income (guaranteed income) at a level of 7.5% of per capita GDP. The threshold income should be approximately 60% of per capita GDP, which corresponds to the average 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%.

Including the common wealth dividend-based basic income, the elderly and disabled without market income will receive 16.5% of per capita GDP, and the general population without market income will receive 9% of per capita GDP 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 encouragement funds. Fully or partially replace existing public assistance benefits, up to the amount of NIT-type basic income.

3. Universal EITC:

Provide a certain percentage of earned income as a work encouragement payment until reaching a certain threshold income for earned income (the employee and self-employed income). For those earning above the threshold income, apply the payment amount for the threshold income. Eliminate the employee income deduction, employee income tax credit of the existing income tax, as well as work encouragement payment.

The threshold income for universal EITC will be about 60% of per capita GDP, 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 for earned income above the threshold income.

4. Replacement of existing public assistance:

Replace fully or partially the existing public assistance benefits, including child allowance, child encouragement fund, basic pension, disability pension, and disability allowance, with the NIT-type basic income within the limit of the amount of the NIT-type basic income payment. Replace the work encouragement payment with universal EITC payment. Keep the basic livelihood security system as it is, but include the NIT-type basic income amount in the calculation of the recognized income to have a partial replacement effect. However, common wealth dividend-based basic income and universal EITC payment are not included in the recognized income.

Financial Feasibility Study and Estimation of Expected Effects: Methods and Data

Our proposal aims for fiscal neutrality, where revenue and expenditures are balanced. This means that the total expenditures, which is the sum of the two-types of basic income payment and the universal EITC payment, should be balanced with the additional tax revenue from the basic income tax and the reduction of existing social security benefits and fiscal savings. Furthermore, this balance should be sustainable in the long term, considering the increase in elderly benefits due to population aging, and any decrease in productive activities due to reduced work incentives should be minimized.

Our proposed common wealth basic income, NIT-type basic income, and universal EITC are all designed to be fiscally neutral. The common wealth basic income does not place any burden on the budget, as the payment amount is not pre-determined but determined each year as 1/n within the available resources. The negative income tax-type basic income can also be operated in a fiscally neutral manner through additional tax revenue from basic income tax, elimination of

personal deductions and child tax credit for income tax, and partial substitution of public assistance. We propose imposing a 10% basic income tax on income exceeding the threshold income, in addition to the existing income tax. However, it may be possible to set the rate for basic income tax lower than this, while increasing corporate tax and value-added tax to compensate. The funding for the universal EITC can also be largely covered by the additional tax revenue from the abolition of employment income deductions and employment income tax credits and the existing work promotion payment budget. To examine the fiscal neutrality and income redistribution effects of these three policies, we will first conduct a static micro-simulation using recent micro-data on income, taxes, and social security benefits. Furthermore, we will analyze the dynamic impact on labor supply and consumption, which will affect the fiscal and macroeconomic aspects in the medium to long term if our proposed reforms are realized.

For simulation analysis, we will primarily use data from the Survey of Household Finances and Living Conditions. The SHFLC provides household survey data on incomes, assets, taxes, social security contributions, and various public transfers at the individual and household levels, which are partially supplemented by administrative data from agencies such as the National Tax Service. The survey has been recognized for providing relatively high-quality data on income distribution by overcoming the problem of underrepresentation of high-income groups in the previous household surveys (Kim, 2020).

While we will use the SHFLC data extensively, we will also use administrative data from the National Tax Service and the National Health Insurance Corporation for supplementary analysis. The National Tax Service provides microdata data on personal income and taxes as well as the EITC and CTC payments. We have also obtained access to the National Health Insurance Corporation's microdata on income and properties. The administrative data from the National Tax Service and the National Health Insurance Corporation lack information on public transfers, hence there are limits to the possible simulation analysis using these data. However, simulations based solely on household survey data may provide misleading results for actual implementation of new income security policies. For example, the Seoul Metropolitan Government provided supplementary emergency relief funds to households with incomes below the median income in the spring of 2020 after the outbreak of COVID-19, when the central government provided all households with national emergency relief funds. The number of households applying for the supplementary funds in Seoul was more than twice the estimate based on the household survey data, and the number of households receiving the funds was nearly double the initial plan. This large discrepancy was due to the differences in the coverage of incomes for the low-income households between the household survey data and the administrative data.

It can be seen that the survey detects more income earners and higher incomes in the low-income group, while the income tax data shows higher incomes in the highest income group. Among the low-income group, especially among recipients of public assistance, there are many cases of unreported income from informal sectors. In addition, agricultural income is tax-exempt, and interest income and dividend income below 20 million won per year and other income below 3 million won per year are subject to a separate low-rate tax and are not included in the personal

global income of the National Tax Service. Furthermore, the National Tax Service does not include capital gains on real estate and stocks and retirement income in personal global income. Despite these limitations, the income and income tax data that aggregates individual incomes and income taxes, including income deductions and tax credits, and the EITC and CTC benefits provided by the National Tax Service are useful in some way.

The redistributive effect of our proposed policies can be analyzed relatively accurately through micro simulations. We will estimate the distribution of net beneficiaries and net burdeners, as well as the net benefit and net burden, by age, gender, household type, and income level, in addition to overall Gini coefficients of equivalized income, poverty rates, poverty gaps, etc.

There are limitations to simulation analysis regarding the labor supply effect, as significant differences may arise depending on assumptions about the elasticity of labor supply and the data used. Therefore, we aim to complement the simulation results by analyzing the impact on labor supply through an analysis of changes in participation and effective marginal tax rates. However, due to the interaction with existing income taxes and public transfers, changes in participation and effective marginal tax rates will be complex, determined not only by individual income levels, but also by household types and household income and assets. We will therefore analyze several representative household types and differentiate between households receiving and not receiving public transfers.

Furthermore, we will examine whether fiscal neutrality can be maintained in the medium to long term, considering the trend of extremely low fertility and rapid aging. As our proposal involves replacing the current basic pension with the NIT-type basic income and is also related to national pension reform, it needs to be evaluated in conjunction with discussions on pension reform. To this end, we will utilize data from Statistics Korea's future population estimates, the 5th National Pension Calculation, and the government's medium to long-term social security fiscal estimates.

Finally, we plan to interpret and discuss the implications of changes in effective tax rates, participation rates, and effective marginal tax rates, on real freedoms, equality, and sustainable efficiency.

The Plan of the Book:

This book consists of 7 chapters, including an introduction (Chapter 1) and a conclusion (Chapter 7).

Chapter 2 examines the necessity and justification of introducing universal basic income. Firstly, it looks at the problems of the existing income security system from the perspectives of freedom, equality, and sustainable efficiency. It demonstrates the issues of high participation tax rates and effective marginal tax rates that restrict real freedom and undermine labor incentives. While it may seem efficient in the short term to concentrate support on the poor, it proves to be

inefficient in the long term. In contrast, basic income shows that it can enhance freedom with relatively low participation tax rates and effective marginal tax rates, and also contribute to economic efficiency. It points out that while the existing social security system leaves labor market outsiders in blind spots, basic income can provide minimum insurance to everyone. Furthermore, it argues that while the existing household-based income security system encourages household dissolution and undermines marriage and childbirth, individual-based basic income can strengthen incentives for marriage and childbirth and prevent depopulation in rural areas. It also discusses the advantages of land dividend-based basic income and carbon dividend-based basic income in facilitating the introduction of land holding tax to suppress real estate speculation and carbon tax to achieve carbon neutrality.

Chapter 3 examines the usefulness of implementing basic income through a negative income tax system, along with how to address the trade-off between basic income (guaranteed income) and the level of threshold income and tax rates (clawback rates). It also discusses the definition of income and the period for income calculations and benefit payments. It shows that the universal EITC, with negative participation tax rates and effective marginal tax rates, can not only strengthen labor incentives by mitigating the increase in participation tax rates and effective marginal tax rates due to the introduction of a NIT-type basic income but also indirectly support low-income workers to pay social security contributions.

In Chapter 4, the book critically analyzes the reality of the Korean welfare state at a crossroads. Firstly, it examines the problems of increasing income and wealth inequality and high elderly poverty that the existing public assistance and social insurance systems cannot effectively address. It specifically diagnoses the problems of the public assistance system such as the excessively high participation tax rates and effective marginal tax rates created by the basic livelihood guarantee system, and the contribution-based social insurance systems such as employment insurance and national pension that exclude the labor market outsiders or fail to protect them properly. Through this analysis, it demonstrates that the expansion and reinforcement of the existing public assistance system cannot be a solution, and that there is a need to gradually replace public assistance with basic income or a negative income tax system. It also shows the need for reforming the existing EITC system, which was introduced in 2008 and expanded considerably under the Moon Jae-in government, into a universal EITC. Finally, it briefly introduces and examines the ongoing pilots and policy experiments of basic income and negative income tax in Korea.

In Chapter 5, the book explains our proposal that combines common wealth basic income, negative income tax-type basic income, and universal EITC. Firstly, it suggests a direction to reform the existing income security system, which is based on social insurance, towards providing universal basic income and universal EITC, while automatically enrolling all adults in the contribution-based earnings-related social insurance system. Additionally, it examines and explains specific points, including funding arrangements, regarding the implementation of common wealth basic income, NIT-type basic income, and universal EITC, which can be immediately feasible. It extensively examines the increase in personal income tax and corporate tax, the introduction of land holding tax and carbon tax, the partial replacement of the existing

cash benefits, and the reform of the structure of fiscal expenditures, as well as the creation of a common wealth fund. It also considers the reform of inheritance and gift taxes and an increase in value-added tax rates. Among these, the most sensitive subject is personal income tax, which affects the most people, so the book focuses on the examination and consideration of the reform measures for personal income tax.

In Chapter 6, we analyze the expected effects of our reform proposal in terms of freedom, equality, and efficiency. Using household survey data and administrative data, we analyze the effects on income redistribution, changes in participation tax rates and effective marginal tax rates through microsimulation. We examine the effects of income redistribution in reducing inequality and promoting equality, as well as the effects of changes in participation tax rates and effective marginal tax rates on the promotion of real freedom and on increasing efficiency through increased labor participation. We not only examine changes in income inequality and poverty rates for the entire population but also analyze these effects by age, gender, household type, and income bracket. Additionally, we investigate the economic effects such as the multiplier effect of increased consumption, the effect of transitioning from the informal to the formal sector, and the effect of increased income reporting. We also discuss the effects of promoting marriage and household formation, preventing low birth rates and rural extinction, and improving the quality of life for the elderly through increased employment opportunities.

In the conclusion (Chapter 7), we provide a summary of the main findings of this book, acknowledge its limitations, and propose additional research topics. We also discuss the political feasibility of basic income, negative income tax, and our proposal in Korea. In addition to the ongoing experiments on rural basic income and safety income, we emphasize the need for additional policy experiments for our proposal and the importance of rigorous and objective comparative evaluation studies on the effects of these experiments. Lastly, we discuss the implications of Korea's basic income discussions and experiments on other countries.