

The Cost and Economic Effects of Safety Income in South Korea

2022. 12

Ki Seong Park (Sungshin University)

Gyeong Lyeob Cho (Korea Economic Research Institute)

Yong Min Kim (Kookmin University)

National Basic Livelihood Security System: Large Blind Zone

- **Large welfare blind zone where many remain unprotected**
(Suicides of a mother and her two adult daughters in Songpa-gu, Seoul in 2014 ~ Suicides of a mother and her two adult daughters in Suwon in 2022)
- **Suicides of families in extreme economic circumstances have consistently occurred, despite the government's significant efforts to expand NBLSS**
- **Theoretically approximately 15% vs. only 4.6% of all households receive LB**
← **the government imposes various strict restrictions on eligibility**

Figure 2-A. National Basic Livelihood Security System: Low Work Incentive

- At A, Household's reservation wage rate exceeds 37% of its market wage rate in 2019

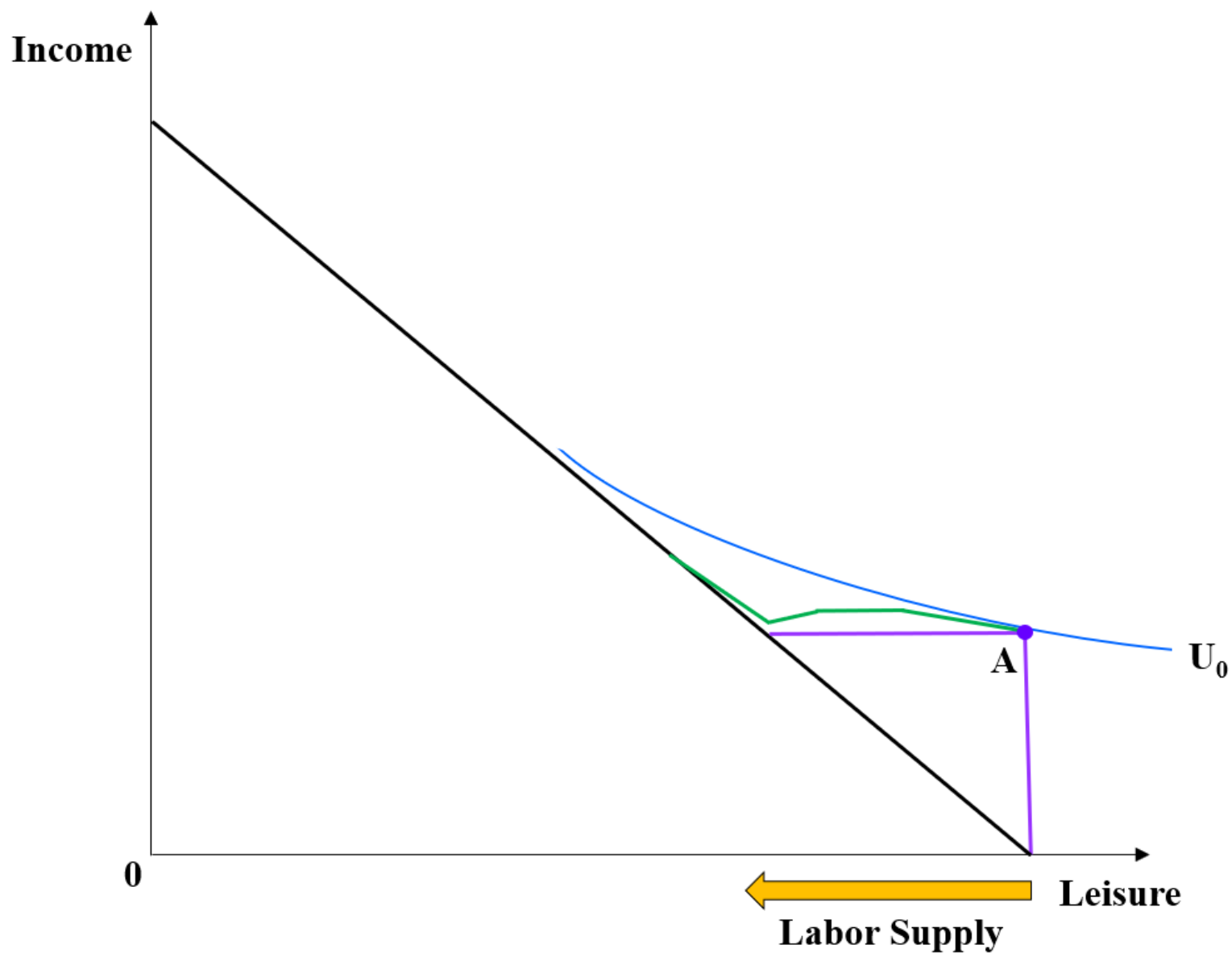


Figure 1. The Basic Structure of SI Following the Principle of “Thick Bottom, Thin Top”

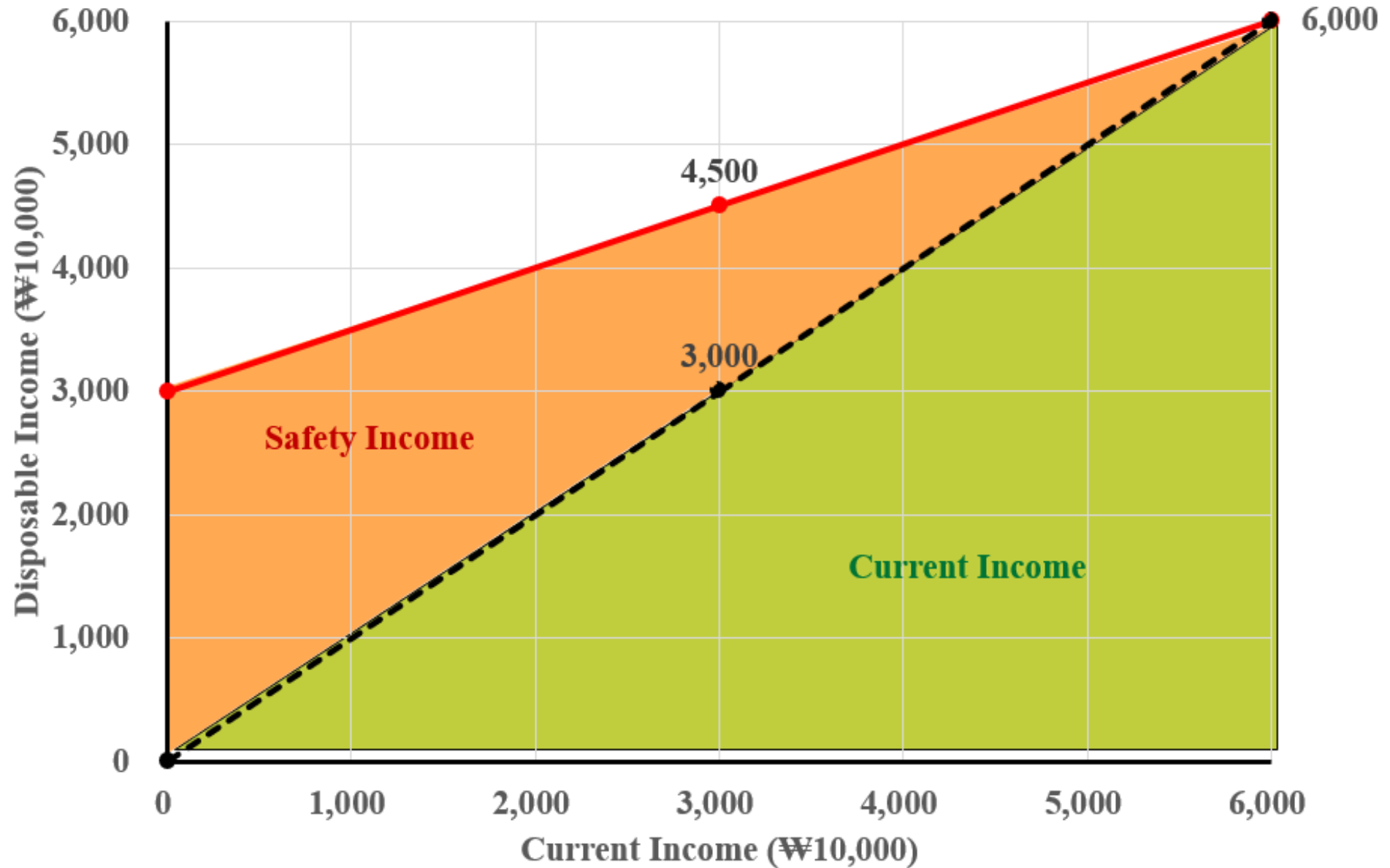
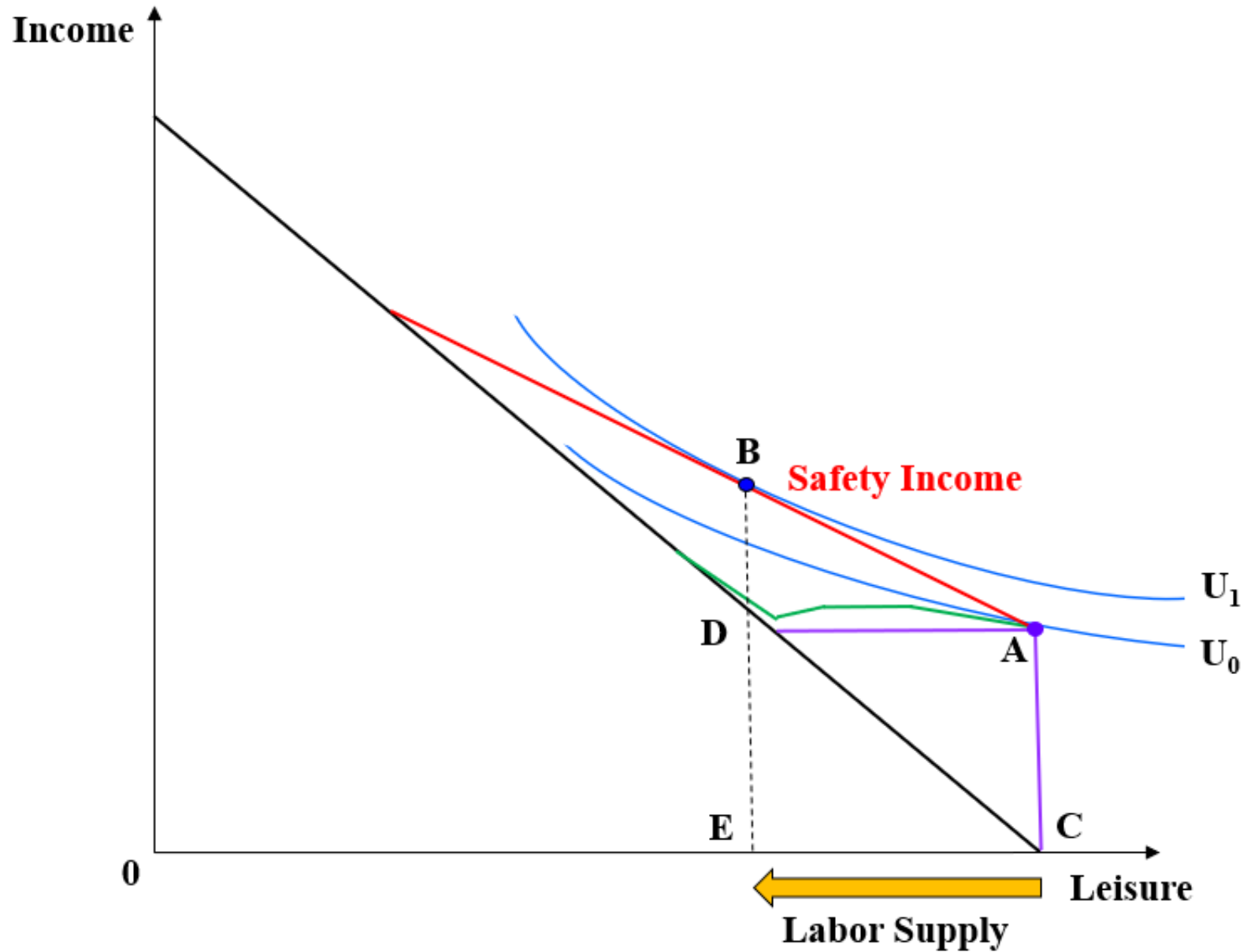


Figure 2. The Change of Labor-Leisure Choice by Safety Income in 2019



Differences between Negative Income Tax (NIT) and Safety Income (SI)

NIT **(Friedman 1962)**

- **Abolishes all current welfare benefits**
- **Suggested with a flat tax rate on income without deduction**
- **Covers only the lowest 10% of households**

SI **(Park 2016)**

- **Maintains almost all current welfare benefits**
- **Maintains the current tax system with many forms of deductions**
- **Covers as much as the lowest 50% of households**

SI Follows the Principle of “Support Forward, Settle Afterward”

Income tax is withheld monthly and settled at the end of the year. In the same way, the amount of SI support is determined only by the income of each household and “paid in advance and adjusted afterward.” SI follows the principle of “Support Forward, Settle Afterward.” Therefore, SI is more likely to prevent suicide due to economic hardship than the current NBLSS.

Table A1. Key Differences between SI and SSIP

Key Factors		Safety Income (SI)	Pilot Project of Seoul Safety Income (SSIP)
Regional Coverage		Nationwide	Seoul
Eligibility	Current Income	Households with an income of the lowest 50 percent	Households with an income of the lowest 42.5 percent
	Net Assets	–	Below ₩326,000,000
Substituted Benefits		<ul style="list-style-type: none"> •Livelihood Benefit •Housing Benefit •Self-reliance Benefits •Earned Income and Child Tax Credits 	<ul style="list-style-type: none"> •Livelihood Benefit •Housing Benefit •Basic Pension •Seoul Youth Basic Living Security Program •Seoul Youth Support •Seoul Youth Allowances •Seoul Housing Voucher
Standard Median Income for the n-member household		Standard Median Income of the 4-member household ÷ 4 × n	Standard Median Income of each n-member household

Table 2. SI Support by Income Bracket and Household Members (₩10,000)

Household Members Household Income Bracket	1	2	3	4	5	More than 5	Mean
W01	354.6	964.1	1,735.1	2,365.9	-	-	
W02	145.2	722.3	1,438.9	1,978.9	2,563.2	-	
W03	57.5	354.8	1,136.6	1,674.3	2,571.0	-	
W04	74.5	84.1	651.7	1,339.4	2,420.0	-	
W05	0.0	0.0	196.0	804.4	1,432.7	3,145.6	
W06	0.0	0.0	252.8	273.9	945.2	1,557.3	
W07	0.0	0.0	0.0	149.0	441.6	1,179.0	
W08	0.0	0.0	0.0	0.0	79.5	463.6	
W09	0.0	0.0	0.0	0.0	0.0	89.6	
W10	0.0	0.0	0.0	0.0	0.0	0.0	
Mean	309.0	556.6	707.8	709.9	946.6	1151.5	500.2

Table 3. Number of Households Eligible for SI Support (Number of Households)

Household Members Household Income Bracket	1	2	3	4	5	More than 5	Sum
W01	2,834,188	377,363	38,343	10,623	-	-	3,260,517
W02	775,336	1,206,986	89,467	21,245	3,117	-	2,096,152
W03	5,808	1,111,925	298,224	42,491	9,351	-	1,467,798
W04	2,904	273,660	400,472	116,850	31,169	-	825,055
W05	0	0	391,951	272,649	40,520	13,221	718,342
W06	0	0	21,302	396,580	99,741	22,036	539,659
W07	0	0	0	21,245	121,560	48,479	191,284
W08	0	0	0	0	28,052	39,664	67,717
W09	0	0	0	0	0	8,814	8,814
W10	0	0	0	0	0	0	0
Sum	3,618,236	2,969,936	1,239,759	881,683	333,510	132,215	9,175,338

Table 4. The Percentage of Households Eligible for SI Support by Household Income Bracket and Household Members (%)

Household Members Household Income Bracket	1	2	3	4	5	More than 5	Total
W01	100.00	100.00	100.00	100.00	-	-	100.00
W02	51.35	100.00	100.00	100.00	100.00	-	74.05
W03	0.76	100.00	100.00	100.00	100.00	-	65.86
W04	0.55	29.87	100.00	100.00	100.00	-	41.46
W05	0.00	0.00	69.17	100.00	100.00	100.00	39.16
W06	0.00	0.00	3.42	100.00	100.00	100.00	30.75
W07	0.00	0.00	0.00	4.14	100.00	100.00	11.45
W08	0.00	0.00	0.00	0.00	20.00	100.00	4.03
W09	0.00	0.00	0.00	0.00	0.00	13.33	0.53
W10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	58.86	52.44	29.39	26.72	41.63	50.85	45.00

Estimating the Additional Budget for Enforcing SI in 2019 – (I)

- We estimate the total cost for enforcing SI based on the market income as ₩75,858.9 billion**
- Then, we estimate the additional budget for enforcing SI as follows:**
 - (1) 100% of the budget for “livelihood, housing, self-reliance benefits, and earned income and child tax credits,” ₩10,944.6 billion, is subtracted from the estimated total cost**
 - (2) 50% of the budget for the other public transfer incomes, ₩70,341.3 billion, is subtracted from it**

Estimating the Additional Budget for Enforcing SI in 2019 – (II)

- The 2018 cash social expenditure of the government is ₩81,285.9 billion

- We have:

₩75,858.9 billion – ₩10,944.6 billion –

$0.5 \times (\text{₩}81,285.9 \text{ billion} - \text{₩}10,944.6 \text{ billion}) = \text{₩}29,743.7 \text{ billion}$

- The additional budget for enforcing SI is estimated as 29,743.7 billion
 - Subject to change according to the budget structure and income distribution of the beneficiaries

Table 5. The Amount of Universal Basic Income Support by Household Income Bracket and Household Members (₩ Billion)

Household Members Household Income Bracket	1	2	3	4	5	More than 5	Sum
W01	1,724.1	459.1	70.0	25.8	-	-	2,279.1
W02	918.6	1,468.5	163.3	51.7	9.5	-	2,611.6
W03	466.4	1,352.9	544.3	103.4	28.4	-	2,495.3
W04	319.7	1,114.5	730.9	284.3	94.8	-	2,544.3
W05	157.2	830.6	1,034.1	663.5	123.2	48.3	2,856.9
W06	67.1	613.3	1,135.2	965.0	303.4	80.4	3,164.5
W07	49.5	417.1	1,026.3	1,249.4	369.7	176.9	3,288.9
W08	14.1	290.9	1,150.7	1,473.4	426.6	144.8	3,500.5
W09	8.8	178.7	995.2	1,714.6	568.8	241.3	3,707.6
W10	14.1	164.7	847.5	1,499.2	512.0	257.4	3,294.9
Sum	3,739.8	6,890.5	7,697.4	8,030.4	2,436.5	949.1	29,743.7

Table 6. The Amount of Support by Household Income Bracket and Household Members When Expanding the Current Cash Welfare Benefits (₩ Billion)

Household Members Household Income Bracket	1	2	3	4	5	More than 5	Sum
W01	615.2	651.4	602.6	530.9	-	-	2,400.0
W02	511.7	817.9	1,102.0	355.6	-	-	2,787.1
W03	167.6	612.0	1,210.7	718.0	778.6	-	3,486.9
W04	190.4	388.8	791.1	741.8	2,265.8	-	4,377.9
W05	58.1	258.2	428.9	638.1	899.7	4,359.8	6,642.7
W06	40.3	199.2	347.7	424.9	929.1	859.9	2,801.1
W07	1.3	58.5	247.1	364.4	757.9	1,175.0	2,604.3
W08	16.5	47.7	186.5	373.2	653.6	490.9	1,768.4
W09	0.0	13.2	147.5	185.5	490.6	587.3	1,424.0
W10	0.0	112.1	108.7	180.3	285.5	764.7	1,451.3
Sum	1,601.0	3,158.9	5,172.7	4,512.8	7,060.8	8,237.5	29,743.7

Table 9. Effects of Three Welfare Systems on Mitigating Household Income Differentials

Income Differential Index	Welfare System	Criterion Coefficient (a)	Direct Effects		Indirect Effects		Final Effects	
			Coefficient (b)	Change from Criterion (%) (b/a-1) x100	Coefficient (c)	Change from Criterion (%) (c/a-1) x100	Coefficient (d)	Change from Criterion (%) (d/a-1) x100
Gini Coefficient	Safety Income	0.38826	0.36142	-6.91289	-0.00039	-0.10045	0.36103	-7.01334
	Universal Basic Income	0.38826	0.38297	-1.36249	0.00056	0.14423	0.38353	-1.21826
	Expanding Current Cash Welfare Benefits	0.38826	0.37947	-2.26395	0.00025	0.06439	0.37972	-2.19956
Income Quintile Ratio	Safety Income	9.34129	7.02113	-24.83768	0.01104	0.11818	7.03234	-24.71768
	Universal Basic Income	9.34129	8.90287	-4.69336	0.09688	1.03712	8.99975	-3.65624
	Expanding Current Cash Welfare Benefits	9.34129	8.82644	-5.51155	0.09058	0.96967	8.91702	-4.54188

Table 10. Effects of Three Welfare Systems on the Change of Employment, Unemployment, and Economically Active Population (Number of Persons)

Household Income Bracket	Safety Income			Universal Basic Income			Expanding Current Cash Welfare Benefits		
	Employed	Unemploy- ed	Economically Active	Employed	Unemployed	Economically Active	Employed	Unemployed	Economically Active
W01	-12,849	-11,193	-24,042	-22,624	5,848	-16,776	-25864	5520	-20344
W02	-53,620	-2,811	-56,430	-25,155	7,808	-17,347	-34097	7248	-26849
W03	-67,705	8,951	-58,754	-26,264	9,549	-16,715	-41085	9882	-31203
W04	-34,437	5,155	-29,282	-24,761	9,996	-14,765	-42030	11864	-30166
W05	-29,125	6,808	-22,316	-27,414	13,664	-13,750	-53691	19244	-34448
W06	-20,462	4,295	-16,167	-27,355	11,876	-15,479	-31942	10690	-21252
W07	-2,051	-2,360	-4,411	-24,225	9,480	-14,744	-25386	6993	-18392
W08	6,053	-573	5,480	-16,837	4,284	-12,553	-13326	3088	-10238
W09	6,197	300	6,497	-14,517	5,011	-9,506	-7719	3489	-4230
W10	21,902	-13	21,889	-9,548	6,503	-3,045	-2277	5380	3103
Total	-186,096	8,559	-177,537	-218,701	84,020	-134,681	-277,416	83,396	-194,020

Table 11. Effects of Three Welfare Systems on Unemployment Rate and Percentage Change

Household Income Bracket	Current Unemployment Rate (%)	Safety Income		Universal Basic Income		Expanding Current Cash Welfare Benefits	
		Unemployed (%)	Change (%p)	Unemployed (%)	Change (%p)	Unemployed (%)	Change (%p)
W01	7.25	5.85	-1.4	7.98	0.73	7.94	0.69
W02	4.34	4.16	-0.18	4.85	0.5	4.81	0.47
W03	5.23	5.64	0.4	5.66	0.43	5.68	0.45
W04	4.78	4.97	0.2	5.16	0.38	5.23	0.45
W05	9.4	9.61	0.21	9.82	0.43	10	0.6
W06	4.69	4.82	0.13	5.05	0.36	5.02	0.32
W07	3.03	2.97	-0.07	3.31	0.27	3.23	0.2
W08	0.8	0.78	-0.02	0.92	0.12	0.89	0.09
W09	1.07	1.08	0.01	1.21	0.14	1.16	0.1
W10	1.81	1.81	0	1.98	0.17	1.95	0.14
Total	3.77	3.8	0.03	4.07	0.3	4.07	0.3

Table 12. Effects of Three Welfare Systems on GDP**(%)**

	GDP
Safety Income	-0.24
Universal Basic Income	-0.54
Expansion of the Current Welfare System	-0.49

- **If the current cash welfare benefits are replaced with SI as much as ~~¥~~29,743.7 billion, the unemployment rate decreases by 0.27% points and GDP increases by 0.25%**
- **If the current cash welfare benefits are replaced with UBI as much as ~~¥~~29,743.7 billion, the unemployment rate is unchanged and GDP decreases by 0.05%**

SI is Both an Economic System and a Welfare System

Everyone in our society could fall into a trap in economic life. When it occurs, SI allows a family to maintain a certain standard of living. One could attempt a risky business or venture unless a family's living is threatened by its failure. Since such an effort is the driving force of the market economy, SI would promote the economic growth. In this sense, SI should be viewed as both an economic system and a welfare system.

In conclusion, SI is superior to UBI and the current cash welfare benefits in all aspects.