

# Universal EITC as a Participation Income: Financial Feasibility and Its Expected Effects in Korea

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# Research Questions

- universal earned income tax credit(EITC):
  - proposed by Leff(2020) and Burman(2020) as a UBI-like EITC
  - an individual-based EITC for every working person
- The case for universal EITC?
- The case for universal EITC for Korea, in particular?
- Financial feasibility of universal EITC in Korea?
- Expected effects of universal EITC in Korea?

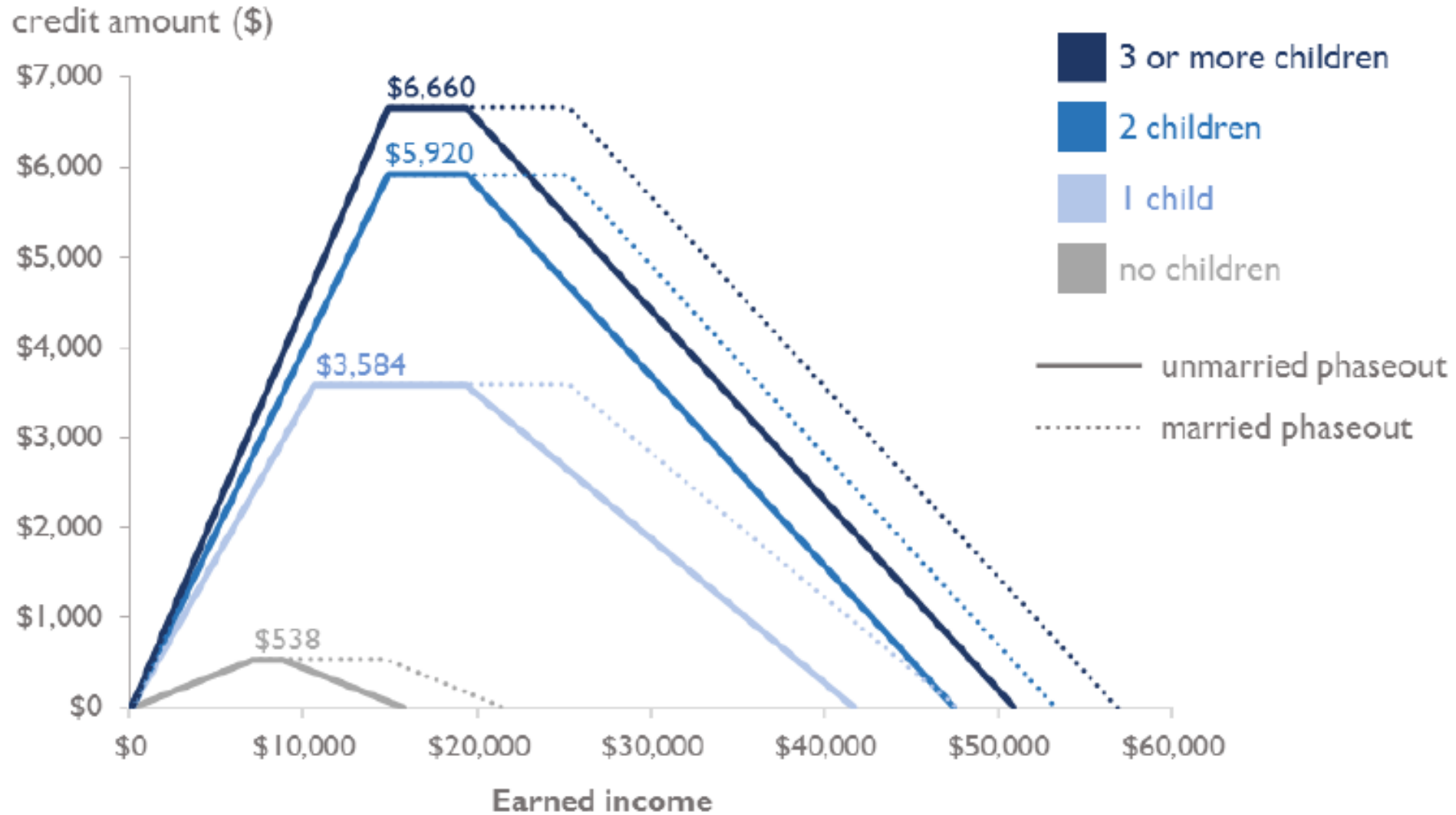
# Earned Income Tax Credit

- a refundable tax credit for low-income working families with children
- first introduced in 1975 in the U. S. as a “work bonus” plan,  
as opposed to negative income tax that provides largest benefits to those without earnings
- phase-in, plateau, and phase-out
- today, the largest anti-poverty program of the US federal government
- Many countries in Europe, Canada, and Korea introduced a similar program.
  - Hailed as a way of helping the working poor without stigma and without work disincentives

# Effects of EITC

- Most studies confirm some work incentives in the phase-in region, but some studies find minor work disincentives in the phase-out region
- Benefits are shared by employees and employers (Microeconomics 101):
  - Downward pressures on wage
  - Encourage small businesses to hire more
- Overall, significant effect on reducing poverty
- However, very complicated and hard to understand
- Marriage penalty

## EITC Amount by Number of Qualifying Children, Marital Status, and Income, 2020



Source: CRS(2021), The Earned Income Tax Credit (EITC): How It Works and Who Receives It

# General case for universal EITC

- on an individual basis: removing marriage penalty
- Universal: removing phaseout of the benefit
- monthly or quarterly payment: instead of annual payment
  
- as a way of combining the merits of both EITC(work incentives) and universal basic income(universality and absence of stigma).
  
- Difficulty: Expensive unless the maximum level of benefit is kept low.
- Unfair(?): Why should the government give benefits to the rich?

# EITC in Korea

- Introduced in 2008 and expanded substantially in 2019
- Child tax credit(CTC) was introduced in 2015.
- Still low levels of benefits, low take-up: Need for more expansion
- Complicated and difficult to understand: Need to simplify

# EITC Payments according to household type

Payment (10 thousand won)



## Asset criteria:

Household assets < 200 million KRW  
Benefit reduced by half, for assets between 140 and 200 million won

## -Marriage penalty

If two persons with 100 million KRW get married, they lose benefits

## Household size: Not considered

-Higher benefit per person for smaller size of household



# Low awareness, too rigid asset test, and low take-up of EITC

| Income decile | Post-tax income | % Recipients | Avg. amount |
|---------------|-----------------|--------------|-------------|
| 1             | 971,760         | 0.0%         | 335,995     |
| 2             | 3,594,058       | 5.7%         | 1,016,061   |
| 3             | 7,062,754       | 19.9%        | 1,412,324   |
| 4             | 12,343,134      | 29.5%        | 1,352,511   |
| 5             | 18,576,989      | 37.6%        | 986,936     |
| 6             | 23,625,175      | 19.3%        | 953,886     |
| 7             | 29,381,094      | 20.2%        | 388,893     |
| 8             | 37,568,633      | 0.73%        | 1,135,250   |
| 9             | 50,919,537      | 0.12%        | 607,273     |
| 10            | 100,944,726     | 0.02%        | 948,000     |
| Total         | 28,493,477      | 0.0%         | 1,064,806   |

Source: National Tax Service (2022)

| Income decile | Earned income | % recipients | Avg. benefit |
|---------------|---------------|--------------|--------------|
| 1             | 1,163         | 8.5%         | 806          |
| 2             | 4,640         | 14.5%        | 1,216        |
| 3             | 9,890         | 15.6%        | 1,645        |
| 4             | 15,316        | 18.2%        | 1,411        |
| 5             | 20,665        | 15.2%        | 1,067        |
| 6             | 25,636        | 15.5%        | 827          |
| 7             | 32,858        | 11.1%        | 971          |
| 8             | 43,091        | 9.4%         | 959          |
| 9             | 59,039        | 5.0%         | 993          |
| 10            | 107,313       | 2.6%         | 818          |
| Total         | 31,874        | 11.6%        | 1,144        |

Source: Survey of Household Finances and Living Conditions

## Percentage of recipients and the amount of in-work benefits by income decile, among the working-age population (2017)

| Income decile | Recipients of unemployment benefits | Average amount of unemployment benefits | Recipients of maternity protection benefits | Average amount of maternity benefits | Recipients of the EITC | Average amount of EITC benefits |
|---------------|-------------------------------------|---|---|--------------------------------------|------------------------|---------------------------------|
|               | (%)                                 | (thousand won)                          | (%)   | (thousand won)                       | (%)                    | (thousand won)                  |
| 1, 2          | 1.16                                | 5,048                                   | 0.13  | 5,006                                | 2.21                   | 918                             |
| 3             | 3.33                                | 5,348                                   | 0.39  | 5,782                                | 28.1                   | 763                             |
| 4             | 7.7                                 | 5,043                                   | 0.66  | 5,323                                | 29.97                  | 1151                            |
| 5             | 9.15                                | 4,377                                   | 0.95  | 4,572                                | 24.44                  | 772                             |
| 6             | 8.35                                | 4,014                                   | 1.2   | 4,707                                | 14.46                  | 481                             |
| 7             | 7.46                                | 3,902                                   | 1.6   | 4,483                                | 4.99                   | 547                             |
| 8             | 6.42                                | 3,834                                   | 1.7   | 4,401                                | 2.16                   | 595                             |
| 9             | 4.8                                 | 3,744                                   | 1.53  | 4,340                                | 0.88                   | 594                             |
| 10            | 2.77                                | 3,740                                   | 1.27  | 3,983                                | 0.21                   | 562                             |
| Total         | 5.58                                | 4,225                                   | 1.06  | 4,506                                | 10.59                  | 821                             |

Employment insurance: Low coverage of precarious workers (the precariat)

-Unemployment benefits and maternity protection allowances(postpartum leave and parental leave benefits) provided through employment insurance have higher recipient rates among the middle-income and upper-income groups than among the low-income groups.

EITC payments: Higher percentage of recipients among low and middle-income.

-But the amount of payment is small.

# The case for universal EITC, particularly for Korea

- Employee income deduction & tax credit as hidden welfare in Korea
  - Employee income deduction is very regressive and much larger than EITC
    - Tax expenditures for the rich are much greater than those for the working poor.
  - Proposals to replace employee income deduction with universal basic income(Kang 2019; You, 2018):
    - Resistance from the working people
  - Replacing employee income deduction with universal EITC will be more acceptable.
- Large blind spots in social insurances
  - Low coverage of National Pension and Employment Insurance among the working poor
  - Universal EITC may help low-income earners to pay social insurance contributions.  
(social insurance contributions=about 10% of employee income, or 20% of self-employed income)

# Income deductions and tax credits

- The same amount of income deduction provides higher benefits to higher-income people.
  - 1 million won deduction for a person of 10 million won income:
    - reduced tax = 1 million \* 6% = 60,000 won
  - 1 million won deduction for a person of 1 billion won income:
    - reduced tax = 1 million \* 45% = 450,000 won
- Employee income deduction:
  - The amount of deduction is higher for higher employee income.
  - The amount of reduced tax is much higher for higher employee income.
- Employee income deduction is very large in Korea.
  - Large in Korea and Japan, compared to other countries.

## Average benefits from employee income deduction & tax credit, and EITC, by income bracket

| Employee income<br>(year-end settlement) |                     | Employee<br>income<br>deduction<br>(A) | Reduced<br>tax<br>due to A<br>(B) | Employee<br>income tax<br>credit (C) | B+C              | EITC<br>payment<br>(D) | B+C+D            |
|--|---------------------|--|-----------------------------------|--------------------------------------|------------------|------------------------|------------------|
| Total wages &<br>salaries (won)          | # of<br>individuals | Average<br>(won)                       | Average<br>(won)                  | Average<br>(won)                     | Average<br>(won) | Average<br>(won)       | Average<br>(won) |
| Total (average)                          | 19,074,871          | 9,371                                  | 1,470                             | 377                                  | 1,848            | 105                    | 1,952            |
| Up to 10 million                         | 2,890,704           | 3,045                                  | 183                               | 16                                   | 199              | 231                    | 430              |
| Up to 15 million                         | 1,431,264           | 6,518                                  | 397                               | 109                                  | 505              | 332                    | 838              |
| Up to 20 million                         | 1,551,944           | 7,889                                  | 655                               | 194                                  | 849              | 191                    | 1,040            |
| Up to 30 million                         | 4,331,915           | 8,927                                  | 1,143                             | 344                                  | 1,487            | 62                     | 1,549            |
| Up to 40 million                         | 2,611,774           | 10,451                                 | 1,546                             | 581                                  | 2,128            | 8                      | 2,136            |
| Up to 45 million                         | 949,555             | 11,614                                 | 1,739                             | 627                                  | 2,366            | 0                      | 2,366            |
| Up to 50 million                         | 795,809             | 12,122                                 | 1,817                             | 640                                  | 2,458            | 0                      | 2,458            |
| Up to 60 million                         | 1,220,521           | 12,487                                 | 1,873                             | 652                                  | 2,525            | 0                      | 2,525            |
| Up to 80 million                         | 1,575,979           | 13,210                                 | 2,666                             | 589                                  | 3,255            | 0                      | 3,255            |
| Up to 100 million                        | 863,500             | 14,179                                 | 3,393                             | 500                                  | 3,893            | 0                      | 3,893            |
| Up to 200 million                        | 754,109             | 15,265                                 | 4,741                             | 499                                  | 5,240            | 0                      | 5,240            |
| Up to 300 million                        | 60,188              | 17,181                                 | 7,030                             | 490                                  | 7,520            | 0                      | 7,520            |
| Up to 500 million                        | 25,362              | 19,686                                 | 9,096                             | 487                                  | 9,583            | 0                      | 9,583            |
| Up to 1 billion                          | 9,393               | 25,309                                 | 13,509                            | 487                                  | 13,995           | 0                      | 13,995           |
| Over 1 billion                           | 2,854               | 49,927                                 | 24,592                            | 495                                  | 25,087           | 0                      | 25,087           |
| Sum(billion)                             |                     | 178,746                                | 28,045                            | 7,196                                | 35,241           | 1,998                  | 37,239           |

Source: NTS(2020), National Tax Statistics Yearbook(Tables 4-2-4 and 14-3-6)

Total benefits from employee income deduction(28 trillion won) and employee income tax credit(7.2 trillion won) are much larger than total amount of EITC (2 trillion won) for the employees.

- EITC given to the self-employed =about 2.5 trillion won

Universal EITC of 10% of earned income and 2.4 million won for earned income of 24 million won or more

- 72% of employees with earned income of 46 million won or less will be better off.
- 28% of high-income earners will be worse off.
- Progressive reform that can be acceptable by the majority of working people.

# Our proposal

- Replace employee income deduction & tax credits with universal EITC on an individual basis.
- Fiscally neutral
- [Phase-in] 10% of earned income, which can cover social insurance contributions for employees.
- [Plateau] 2.4 million KRW, for earned income  $\geq$  24 million KRW (average personal income in 2021)
- [No phase-out]: High earned income gets 2.4 million KRW, but loses employee income deduction.
- Existing EITC could be incorporated into the universal EITC, or maintained as a supplementary tool to alleviate in-work poverty.

# Distributional effect of universal EITC (Survey data)

- 1) replacing employee income deduction and employee income tax credit
- 2) replacing current EITC as well as employee income deduction/tax credit

| Decile            | Earned income | Reduced tax due to employee deduction | Existing EITC Benefits | Reduced tax + EITC | Universal EITC | Net gain(1) | % winner(1) | Net gain(2) | % winner(2) |
|-------------------|---------------|---------------------------------------|------------------------|--------------------|----------------|-------------|-------------|-------------|-------------|
| 1                 | 1,163         | 33                                    | 68                     | 101                | 116            | 84          | 99.3%       | 16          | 91.1%       |
| 2                 | 4,640         | 143                                   | 177                    | 320                | 464            | 321         | 99.0%       | 144         | 86.0%       |
| 3                 | 9,890         | 328                                   | 256                    | 584                | 989            | 661         | 99.5%       | 405         | 86.9%       |
| 4                 | 15,316        | 599                                   | 257                    | 856                | 1,532          | 933         | 99.4%       | 676         | 86.8%       |
| 5                 | 20,665        | 1,153                                 | 162                    | 1,315              | 2,064          | 911         | 99.7%       | 749         | 91.5%       |
| 6                 | 25,636        | 1,571                                 | 128                    | 1,700              | 2,256          | 685         | 95.4%       | 556         | 87.8%       |
| 7                 | 32,858        | 1,743                                 | 108                    | 1,850              | 2,256          | 513         | 35.4%       | 406         | 34.1%       |
| 8                 | 43,091        | 1,994                                 | 90                     | 2,084              | 2,256          | 262         | 25.8%       | 173         | 24.9%       |
| 9                 | 59,039        | 2,595                                 | 49                     | 2,644              | 2,256          | -339        | 22.7%       | -388        | 22.4%       |
| 10                | 107,313       | 4,073                                 | 21                     | 4,094              | 2,256          | -1,817      | 17.6%       | -1,838      | 17.5%       |
| Total             | 31,874        | 1,417                                 | 132                    | 1,549              | 1,637          | 220         | 69.4%       | 88          | 62.9%       |
| Sum(trillion won) | 967.8         | 43.0                                  | 4.0                    | 47.0               | 49.7           | 6.7         |             | 2.7         |             |

(unit: thousand won, %)

Using data from the Survey of Household Finances & Living Conditions

# Distributional effect of universal EITC, replacing current EITC as well as employee income deduction and tax credit (Tax data)

| Decile | Post-tax income | Reduced tax due to employee deduction | Existing EITC | Reduced tax + EITC | Universal EITC | Average gain | % winner |
|--------|-----------------|---------------------------------------|---------------|--------------------|----------------|--------------|----------|
| 1      | 971760          | 8644                                  | 57694         | 66338              | 94408          | 28070        | 81.8%    |
| 2      | 3594058         | 30094                                 | 281142        | 311236             | 329062         | 17826        | 69.6%    |
| 3      | 7062754         | 98378                                 | 399607        | 497985             | 657993         | 160008       | 69.2%    |
| 4      | 12343134        | 263636                                | 370965        | 634601             | 1193702        | 559101       | 76.9%    |
| 5      | 18576989        | 694306                                | 184218        | 878524             | 1880483        | 1001959      | 91.5%    |
| 6      | 23625175        | 1204435                               | 78747         | 1283182            | 2198560        | 915378       | 95.6%    |
| 7      | 29381094        | 1644141                               | 8325          | 1652466            | 2209042        | 556576       | 82.1%    |
| 8      | 37568633        | 1967493                               | 754           | 1968247            | 2216072        | 247825       | 32.3%    |
| 9      | 50919537        | 2350807                               | 222           | 2351029            | 2221207        | -129822      | 16.5%    |
| 10     | 100944726       | 4017012                               | 79            | 4017091            | 2211391        | -1805700     | 12.1%    |
| Total  | 28493477        | 1227685                               | 138138        | 1365823            | 1520947        | 155124       | 62.8%    |

(Unit: thousand won, %)

Using the National Tax Service's 2% random sample micro data on personal income taxes for year 2020



# Labor supply effect

- The effect of replacing employee income deductions, credits and EITC with universal EITC on labor market participation
  - Controls: Age, sex, education, household size
  - Dependent variable: Employed or not
  - Logistic quantile regression: Whether probability of working increases or not for each income decile
  - Due to limitation of available data, we did not examine the labor supply effect at the intensive margin (work more or less) and focused on the extensive margin (work or not).

# Estimated Labor Supply Effect

| Decile | increasing | No change | Decreasing |
|--------|------------|-----------|------------|
| 1      | 1.42       | 98.58     | 0          |
| 2      | 39.59      | 60.35     | 0.06       |
| 3      | 87.5       | 11.16     | 1.34       |
| 4      | 95.03      | 1.88      | 3.09       |
| 5      | 96.3       | 0.58      | 3.12       |
| 6      | 83.64      | 0.16      | 16.2       |
| 7      | 20.75      | 0.47      | 78.78      |
| 8      | 24.4       | 0.13      | 75.47      |
| 9      | 13.86      | 0.59      | 85.55      |
| 10     | 14.83      | 0.36      | 84.82      |
| Total  | 47.65      | 17.53     | 34.82      |

Unit: %

Individuals with no earned income are not affected.  
(mainly, retirees)

# A Participation Income?

- Transforming the current in-work benefits more like a UBI
  - We originally proposed replacing the regressive employee income deductions with a UBI.
    - resistance from the workers
- A form of participation income:
  - Eligibility is conditional on participation in labor force
  - Is this discrimination on those excluded?
  - What about non-paid work?
- Two answers:
- This is a reform of existing in-work benefits in the direction of UBI
  - Considering that unearned income (capital income and capital gains) tend to be taxed less than earned income, we should not abolish but increase in-work benefits
  - Reform of a rent-seeking economy
- Supplementary benefits for participation in non-paid work could be introduced.
  - Universal EITC at the national level, and supplementary programs at the local level

# Questions & Comments, welcome!

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