THE NEW SCHOOL

SCHWARTZ CENTER
FOR ECONOMIC
POLICY ANALYSIS

POLICYNOTE

THE IMPACT OF GUARANTEED RETIREMENT ACCOUNTS ON THE RETIREMENT CRISIS

by **Teresa Ghilarducci**, Bernard L. and Irene Schwartz Professor of Economics at The New School for Social Research and Director of SCEPA's Retirement Equity Lab (ReLab); **Michael Papadopoulos**, ReLab Research Associate; and **Anthony Webb**, ReLab Research Director.

ELEVATOR PITCH

Guaranteed Retirement Accounts (GRAs), proposed in the 2018 book *Rescuing Retirement* by Teresa Ghilarducci and Tony James, are universal individual accounts funded throughout a worker's career by employer and employee contributions and a refundable tax credit. If GRAs were implemented in 2018, 1.5 million seniors would be saved from poverty or near poverty by 2025. This increases to 3.6 million seniors by 2035 and 8.1 million seniors by 2045.

KEY FINDINGS

- If we do nothing to reform the current retirement system, the number of poor or near-poor people over the age of 62 will increase by 25% between 2018 and 2045, from 17.5 million to 21.8 million.

- If the GRA were implemented in 2018, 8.1 million seniors would be saved from old-age poverty or near poverty by the year 2045.

Table 1: GRA Lowers the Number of People Ages 62+ Living In or Near Poverty
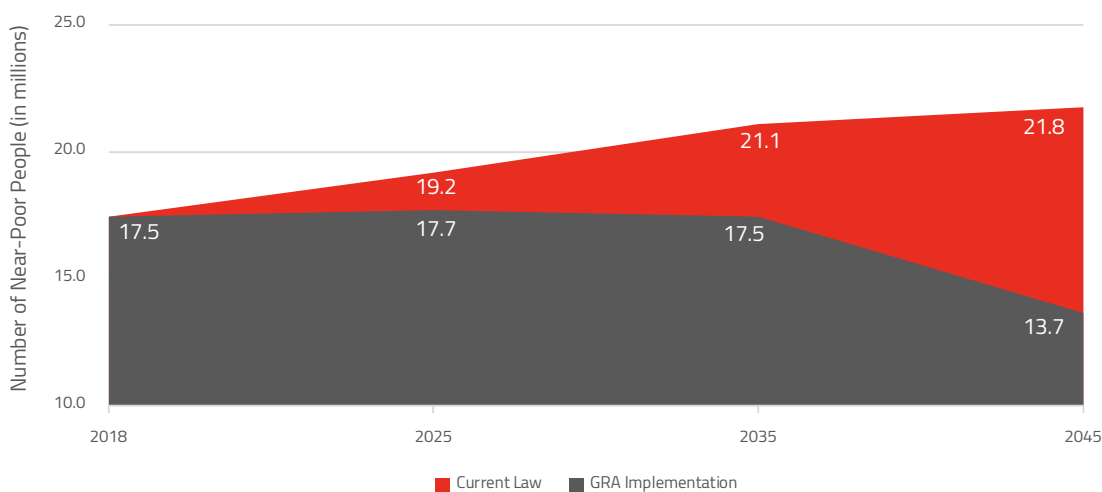
Suggested Citation: Ghilarducci, T., Webb, A., & Papadopoulos, M. (2018). "The Impact of Guaranteed Retirement Accounts on the Retirement Crisis." Schwartz Center for Economic Policy Analysis and Department of Economics, The New School for Social Research, Policy Note Series.

THE UNITED STATES FACES A RETIREMENT SAVINGS CRISIS

The median retirement savings account balance for workers ages 50-60 is $15,000 (ReLab's policy note, *Inadequate Retirement Savings for Workers Nearing Retirement*). In 2016, 57 percent of older workers did not have access to retirement plan or did not participate, a share that has increased over the last 30 years.

Those with access would have to save impossibly large shares of their incomes to retire at customary retirement ages. For many, working longer is not a solution, due to ill health and lack of employment opportunities.

THE RETIREMENT CRISIS WILL RESULT IN GROWING NUMBERS OF INDIGENT ELDERLY

The crisis only gets worse if we wait to take action to reform our current, failed retirement system. If we do nothing to address inadequate savings, the number of poor or near-poor people over the age of 62 will increase by:
- 10 percent between 2018 and 2025, from 17.5 million people to 19.2 million,
- 21 percent between 2018 and 2035, to 21.1 million,
- 25 percent between 2018 and 2045, to 21.8 million (See Table 2, Increase in Near Poverty).

We classify elders who fall below the Federal Poverty Level as poor and those below 200% of the FPL as near-poor. The federal government uses the latter to determine access to means-tested programs. The FPL in 2018 was $12,140 per year for individuals and $16,480 per year for couples. Twice the FPL, or 200%, represents annual incomes less than $24,280 for individuals and $32,960 for couples. For those with higher income levels during their working lives, falling below these income levels in retirement often represents a severe reduction in their standard of living.

Table 2: Effect of GRA Implementation on People Ages 62+ Living Below 200% FPL, Assuming 4.5% Real Return on Investments					
Year		**2018**	**2025**	**2035**	**2045**
Projected Population		64,787,604	78,675,570	90,964,942	97,540,712
Current System	Near Poverty Rate	27.2%	24.4%	23.2%	22.3%
	Near Poor People	17,455,573	19,196,839	21,103,867	21,751,579
	Increase in Near Poverty	NA	10.0%	20.9%	24.6%
Reform	Near Poverty Rate	27.2%	22.5%	19.2%	14.0%
	Near Poor People	17,455,573	17,702,003	17,465,269	13,655,700
	Increase in Near Poverty	NA	1.4%	0.0%	-21.8%
Difference	Near Poverty Rate	0.0%	-1.9%	-4.0%	-8.3%
	Near Poor People	0	(1,494,836)	(3,638,598)	(8,095,879)

THE GRA CAN DECREASE NEAR POVERTY IN THE NEXT 30 YEARS

Guaranteed Retirement Accounts are individual retirement savings accounts. All workers would be defaulted into a retirement savings plan where they contribute 1.5 percent of salary matched by the employer for a total contribution of 3 percent of salary. This contribution would be supported by the government in the form of a refundable tax credit. The funds would be professionally managed, and the government would guarantee principal. If GRAs are implemented in 2018, millions of workers could be saved from poverty or near poverty in old age.

- By 2025, the number of near poor would decrease to 17.7 million, 1.5 million less than the current law projection of 19.2 million.
- By 2035, the number of near poor would decrease to 17.5 million, 3.6 million less than the current law projection of 21.1 million.
- By 2045, the number of near poor would decrease to 13.7 million, 8.1 million less than the current law projection of 21.8 million (Table 2).

Without the GRA, the number of near poor or poor elderly will increase, despite a decrease in the share. With the GRA, both the number and the share of near poor will decrease by 2045.

The impact of the GRA on elder poverty and near poverty increases over time as the share of the elder population with GRA benefits increases and average benefits grow as a result of longer participation. In 2025, 51.1 percent of the elder populations will live in households with an entitlement to GRA benefits, compared with 79.4 percent in 2035 and 95.3 percent in 2045. The median GRA pension of recipients will grow from $1,200 per year in 2025 to $3,300 in 2035, and $6,700 in 2045 (all in constant 2018 dollars) (Table 3). The sooner the program is launched, the sooner it will mature, with all retirees who previously worked for pay receiving benefits.

Table 3: Maturation of the GRA Program				
Year	**2018**	**2025**	**2035**	**2045**
Share of Households with Benefits	0%	51.1%	79.4%	95.3%
Median Benefit (in 2018 dollars)	$0	$1,200	$3,300	$6,700
Notes: Benefits rounded to the nearest $100.				

CONCLUSION

If the GRA were created and implemented by the federal government today, in less than ten years, the increase in the number of elderly who are poor or near poor would be reduced by 1.5 million, with even greater reductions in future years. Even though today's older workers do not have many years before retirement, the GRA will boost their retirement income. The sooner we implement the GRA, the sooner will the increase in elder poverty be reversed.

TECHNICAL APPENDIX

Projecting GRA Impact on Number and Share of Near Poor People Ages 62+

The Census Bureau projects the size of the population for every age for the years 2025, 2035, and 2045. Separately, the Urban Institute, using the Dynamic Simulation of Income Model (DYNASIM) projects the near poverty rate for people ages 62+ for these years. We project the number of near-poor elders under current law by multiplying the Census Bureau projected population of each age group by the DYNASIM-projected near poverty rates.

Next we project near poverty rates with GRAs implemented. That projection is done in four steps:

1. Using the March 2017 Current Population Survey (CPS), we calculate a base case, which is the poverty rate among people ages 62+ in 2025. This is calculated by reweighting the 2017 sample based on projected changes in the age distribution of the elderly. We use the same procedure for the years 2035 and 2045.

2. For each of the people we project will be over 62 in 2025, we estimate an age earnings profile, assuming that their age-earnings profiles (average earnings by age) mirror those of Social Security Administration (SSA) scaled earners. The use of age-earnings profiles is important because average earnings decline at older ages. If we assumed continued growth in wages until people retired we would overestimate earnings at older ages, and therefore GRA contributions and account balances.

3. We assume that people who are younger than 65 in 2018 will contribute to the GRA to retirement at age 65. For example, someone who is 60 in 2018 would contribute from 2018 to 2023, when he attained age 65 and was assumed to retire and claim Social Security and GRA benefits (see below on projection of Social Security and GRA benefits).

4. We add income from the GRA to existing income, and calculate the overall percentage reduction in poverty or near poverty, then apply this percentage reduction to the DYNASIM-projected near poverty rates. For example, if we find that the poverty rate in the CPS would be

reduced by 20% (i.e. from 10% to 8%), we apply the same reduction to the DYNASIM-projected rate. The CPS and DYNASIM projected rates are close but differ, because the latter incorporates economy-wide income growth.

Mortality and Investment Return Assumptions

We assume GRAs are converted into an inflation-adjusted single life annuity at a price that is actuarially fair to members of the 1943 birth cohort, assuming a 2.7% real rate of interest. This assumed real rate is higher than the Treasury Inflation Protected Securities (TIPS) rate in March 2018, but it is appropriate because it is the long-term real interest rate assumed by the Social Security Trustees in 2017. The resulting annuity rate of 7.6% is two-thirds higher than spring 2018 rates in the individual annuity market, because insurers suffer from adverse selection and need to cover their cost of capital, including reserves for aggregate mortality risk (the risk that average annuitant mortality is lower than predicted).

The GRA will largely eliminate these cost drivers through mandated group self-annuitization, although we recognize that some residual adverse selection will result from the correlation between wages and GRA contributions on the one hand and socioeconomic status and mortality on the other hand. Subsequent birth cohorts will also face lower annuity rates if mortality continues to decline.

Our base case scenario assumes a 4.5% real return during the accumulation phase, consistent with a 40:40:20 split between stocks, bonds, and alternatives, with stocks returning 5.5%, bonds 2.25%, and alternatives 7.0%. Our analysis of Ibbotson (2015) data show that over the period 1926-2012, the real geometric mean returns on large capitalization stocks and long-term corporate bonds averaged 6.8% and 3.6% respectively. Real returns on both stocks and bonds will likely be lower in future (Diamond 2000), with the March 2018 forward PE ratio on the S&P 500 implying real stock returns of 6%. We assume that the GRA will be earn an illiquidity premium of 1.5% on the share of GRA assets in alternative investments. We recognize that this premium is imprecisely estimated, may vary across alternative asset classes, and may in part be a reward for bearing additional risk. However,

TECHNICAL APPENDIX (CONTINUED)

our results are relatively insensitive to alternative estimates of the magnitude of this premium. Our conservative scenario assumes a 3% return, reflecting low current yields on Treasury Inflation Protected Securities and a high current cyclically adjusted price earnings ratio (Appendix Table 1).

Appendix Table 1: Effect of GRA Implementation on People Ages 62+ Living Below 200% FPL, Assuming 3% Real Return on Investments						
Year		2018	2025	2035	2045
Projected Population		64,787,604	78,675,570	90,964,942	97,540,712
Current System	Near Poverty Rate	27.2%	24.4%	23.2%	22.3%
	Near Poor People	17,455,573	19,196,839	21,103,867	21,751,579
	Increase in Near Poverty	NA	10.0%	20.9%	24.6%
Reform	Near Poverty Rate	27.2%	22.9%	19.7%	15.5%
	Near Poor People	17,455,573	18,016,706	17,920,094	15,118,810
	Increase in Near Poverty	NA	3.2%	2.7%	-13.4%
Difference	Near Poverty Rate	0.0%	-1.5%	-3.5%	-6.8%
	Near Poor People	0	(1,180,134)	(3,183,773)	(6,632,768)

REFERENCES

Diamond, P. A. (2000). What stock market returns to expect for the future. Soc. Sec. Bull., 63, 38.

Ghilarducci, T., & James, T. 2018. *Rescuing retirement*. Columbia University Press: New York.

Ghilarducci, T., Papadopoulos, M., and Webb, A. (2017) "Inadequate Retirement Savings for Workers Nearing Retirement." Schwartz Center for Economic Policy Analysis and Department of Economics, The New School for Social Research, Policy Note Series.

THE NEW SCHOOL

SCHWARTZ CENTER FOR ECONOMIC POLICY ANALYSIS