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WHAT IS PROGRESSIVE PRICE INDEXING?

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Introduction

As just reiterated in the 2005 *Trustees Report*, Social Security faces a 75-year deficit equal to roughly 2 percent of taxable payrolls. Closing this gap requires either a cut in benefits or an increase in taxes. One approach to cutting benefits under consideration by the administration is to change how benefits are indexed. An earlier *Just the Facts* explored the implications for benefits of moving from "wage indexing" of benefits to "price indexing." This *Just the Facts* describes a proposal for "progressive price indexing." The notion is that benefits for low-wage earners would continue to rise in line with wages, while those for maximum earners would rise in line with prices; everyone in between would see some combination of the two. The implication is that replacement rates — benefits as a percent of pre-retirement earnings — for low earners would remain constant over time, but replacement rates for high earners would decline sharply. The higher the earnings, the sharper would be the decline.

How Progressive Price Indexing Works

Keeping benefits up to date with prices means that future retirees will be able to buy the same bundle of goods and services as today's retirees. Adjusting benefits in line with wages means that the program replaces a similar share of a worker's pre-retirement income. Progressive price indexing combines both approaches.

Under current law, initial benefits received by each group of new retirees rise at the rate of wage growth. The procedure involves three steps.[1] First, a worker's previous earnings are restated in terms of today's wages by indexing past earnings to wage growth. Second, earnings for the highest 35 years are then averaged and divided by 12 to calculate "Average Indexed Monthly Earnings." Finally, the Social Security benefit formula is applied to Average Indexed Monthly Earnings to yield the benefit payable at the normal retirement age. The benefit formula is progressive in that the factor applied to the first dollars of earnings is higher than those applied to additional amounts. So, the formula replaces a larger share of the income of low-wage workers compared to high-wage workers. Specifically, benefits for workers reaching the normal retirement age in 2005 equal:

- 90 percent of the worker's first $627 of Average Indexed Monthly Earnings, plus
- 32 percent of indexed monthly earnings between $627 and $3,779, plus
- 15 percent of any indexed monthly earnings in excess of $3,779

The so-called "bend points"— $627 and $3,779 — are adjusted each year in line with the growth in average wages over the previous year. Once this

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initial benefit is awarded, it is adjusted each year in line with the Consumer Price Index so that beneficiaries can maintain their purchasing power in retirement.

Under progressive price indexing, the bottom 30 percent of workers — those that make less than about $20,000 today — would have their benefits calculated under the current formula. Those workers who earn the taxable maximum — currently $90,000 — over their lifetime would have their benefits calculated using price indexing.[2] Those earning between $20,000 and $90,000 would get a benefit somewhere between the benefit provided under current law and that provided under price indexing.

Table 1 shows the replacement rates scheduled under current law, those that emerge from price indexing, and those that emerge from progressive price indexing. (Note that replacement rates are already scheduled to decline under current law as a result of the increase in the normal retirement age from 65 to 67.) As described, low earning individuals get the same replacement rates as they would under current law, and maximum earners get the same replacement rates as they would under price indexing. Those in between do better than they would under price indexing, but experience substantial cuts relative to current law.

Figure 1 shows the percent reductions relative to current law for the progressive price indexing proposal. These reductions are for a medium earner (one who makes $36,600 today) retiring at age 65 in various years.

Mechanics of Progressive Price Indexing

Reading the technical detail in this Box will make most people miserable! Under the progressive indexing proposal, Average Indexed Monthly Earnings (AIME) would continue to be calculated as under current law. But the procedure would introduce a new "bend point" to isolate low-income workers from benefit changes. If progressive indexation were to start immediately, the benefit of workers reaching normal retirement age in 2005 would equal:

Old Formula

- 90 percent of the worker's first $627 of AIME, plus
- 32 percent of AIME between $627 and $3,779, plus
- 15 percent of any AIME in excess of $3,779.

New Formula

- 90 percent of the worker's first $627 of AIME, plus
- 32 percent of AIME between $627 and $1,528, plus
- *32 percent of AIME between $1,528 and $3,779, plus*
- *15 percent of any AIME in excess of $3,779.*

The $1,528 "bend point" was selected so that 30 percent of workers have AIMEs below that amount. (The approach is flexible in that the 30 percent threshold could be made higher or lower.) Progressive indexing works by reducing the factors in the benefit formula above the newly introduced "bend point" — that is, the 32 percent between $1,528 and $3,779 and the 15 percent above $3,779. This is done by calculating the amount necessary to keep the benefit of a maximum earner constant in real terms, and backing out the factors that would produce that amount. The two factors are required to be reduced by the same proportion. Note that under progressive indexing, as under current law, the bend points — $627, $1,528, and $3,779 — would be adjusted each year in line with the growth in average wages.

The result is a hybrid indexing between the current method of indexing and price indexing. Initial benefits received by each group of low-income retirees still rise at the rate of wage growth, while the initial benefits of those with earnings at the maximum will only increase with prices. For those in between, initial benefits will increase slower than the rate of growth of wages, but faster than price increases.

Year	Factor 1	Factor 2	Factor 3	Factor 4
2005	.90	.32	.32	.15
2035	.90	.32	.20	.09
2075	.90	.32	.05	.02

Implications for the Benefit Structure

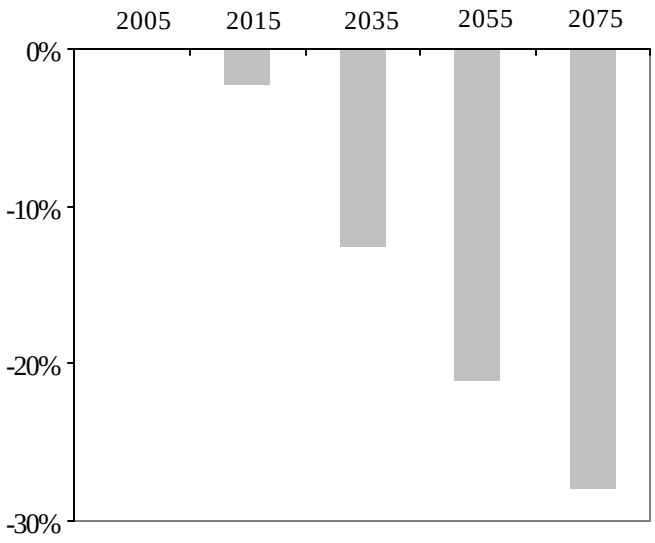
Progressive price indexing would dramatically change the benefit structure over time. Today, high earners contribute more in payroll taxes and receive a larger dollar benefit than medium earners. As shown in Figure 2 (see page 4), by 2100 virtually all Social Security beneficiaries with earnings above the medium would receive the same dollar benefit regardless of how much they contributed to the system. Thus, if progressive price indexing were to continue beyond the 75-year period, Social Security would eventually provide a flat benefit rather than an earnings related benefit for much of the population.[3]

Implications for Social Security Solvency

Progressive price indexing would reduce future benefits enough to eliminate roughly three quarters of the 75-year shortfall. Pure price indexing would more than eliminate the entire 75-year deficit. The remaining shortfall under progressive price indexing thus would require either some new revenues or further benefit cuts during the 75-year period.

FIGURE 1. PROGRESSIVE INDEXING REDUCES BENEFITS BY INCREASING AMOUNTS OVER TIME

Percentage Reduction from Current Law for Medium Earner



Source: Authors' calculations.

TABLE 1. SHIFT FROM WAGE TO PROGRESSIVE PRICE INDEXING CUTS REPLACEMENT RATES FOR MOST WORKERS BUT PROTECTS LOW EARNERS

Percentage of Pre-Retirement Earnings Replaced by Social Security Benefits

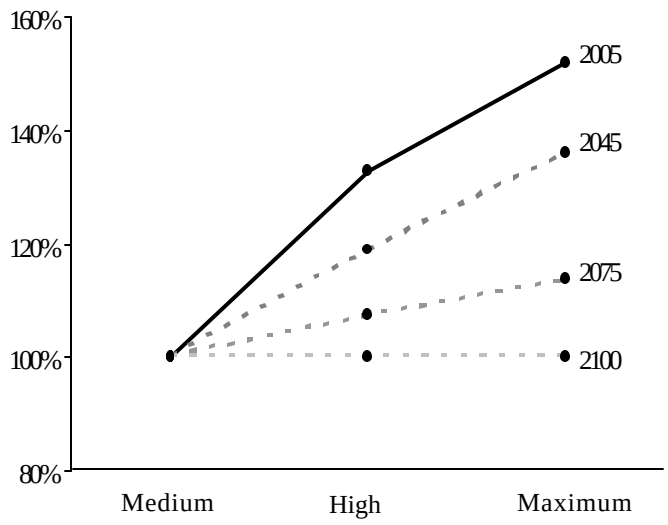
Year	Type of Indexing	Earnings			
		Low ($16,470)	Medium ($36,600)	High ($58,560)	Maximum ($90,000)
2005	Current Law	57	42	35	30
2015	Current Law	53	39	32	26
	Progressive Indexing	53	38	31	25
	Price Indexing	50	37	31	25
2035	Current Law	49	36	30	24
	Progressive Indexing	49	32	24	19
	Price Indexing	38	28	23	19
2055	Current Law	49	36	30	24
	Progressive Indexing	49	29	21	15
	Price Indexing	31	23	19	15
2075	Current Law	49	36	30	24
	Progressive Indexing	49	26	18	12
	Price Indexing	25	18	15	12

Source: Authors' calculations.

Note: The reduction in the replacement rate is scheduled to drop under the current system between 2005 and 2025 due to the increase in the "full benefits" retirement age from 65 to 67. Progressive and price indexation are assumed to start in 2012.

FIGURE 2. PROGRESSIVE INDEXING FLATTENS BENEFITS

Benefits as Percent of Medium Earner Benefit



Source: Authors' calculations based on presentation in Furman (2005).

Conclusion

Progressive price indexing has the advantage of protecting the benefits of low earning workers. These workers would be assured of receiving the same amount relative to previous earnings as they do today. The cuts under progressive price indexing come increasingly from those with higher earnings. Ultimately, high earners will receive the same dollar benefit as those making much less. The policy question is whether it is possible to cut the benefits of higher wage workers so drastically and still retain their support for the program. For this reason, proponents suggest combining progressive price indexing with diverting part of the current payroll tax to voluntary personal accounts as a "sweetener." To the extent that higher income individuals can earn more than a real return of 3 percent — the rate used to offset traditional benefits under President Bush's personal account proposal — they will be able to compensate for some of the reduction in their benefit. But some recent studies suggest a 3 percent real return may be a high hurdle.[4]

Endnotes

1 For a detailed explanation of how to calculate Social Security benefits, see Social Security Administration (2004).

2 As described in the earlier *Just the Facts*, the mechanics of price indexing are as follows: Average Indexed Monthly Earnings would continue to be calculated as under current law. But the benefit formula would be changed. Each year, the factors in the benefit formula — that is, the 90 percent, the 32 percent, and the 15 percent — would be adjusted to offset the growth of real wages. This is done by multiplying each factor by the ratio of the change in the consumer price index over the previous year to the change in nominal wages. Since wages typically increase faster than prices, this number will generally be less than one. For example, if in the year after price indexing was enacted the Consumer Price Index increased by 3 percent and wages increased by 4 percent, the ratio would be 1.03 divided by 1.04, or 0.99 percent. The factors would then be multiplied by .99. And the effect on benefits would be cumulative over time.

3 Benefits become flat once the two upper factors used in the calculation of the primary insurance amount reach zero. Since the factors would likely not go below zero, at this point the flat benefit would begin increasing again at the rate of wage growth.

4 Shiller (2005); Andrews (2005); Whitehouse (2005); and Goldman Sachs (2005).

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