What does price indexing mean for Social Security benefits?

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Chestnut Hill, Mass.: Center for Retirement Research at Boston College, January 2005

JUST THE FACTS
On Retirement Issues
JANUARY 2005, NUMBER 14

CENTER FOR RETIREMENT RESEARCH AT BOSTON COLLEGE

WHAT DOES PRICE INDEXING MEAN FOR SOCIAL SECURITY BENEFITS?

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Introduction

A major component of the administration's Social Security proposal is to shift from "wage indexing" of benefits to "price indexing." This change sounds modest, but, in fact, would change the nature of the Social Security program. Price indexing would preserve the purchasing power of Social Security benefits, but these benefits would represent an ever-declining percentage of earnings before retirement.

This *Just the Facts* discusses the reasons for keeping benefits up-to-date with either prices or wages. Then it describes the mechanics of both wage and price indexing, and the impact of shifting from wages to prices. Finally, it explores the implications of price indexing in terms of possible long-run responses — periodic adjustments or increased reliance on welfare programs.

The Philosophical Issue

The question of whether benefits should be kept up-to-date with wages or prices involves an important philosophical issue about how to measure an individual's standard of living. 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. Assuming real wages continue to rise, this means that future benefits will allow retirees to purchase more goods and services than workers today.

The notion that the absolute amount is the appropriate benchmark reflects a view that the goal of Social Security is to guarantee a basic level of support, and that this level is best understood as a bundle of goods and services, such as food, clothing, and shelter. Assuming today's benefits are fairly adequate, keeping today's benefits up-to-date with prices will allow future retirees to purchase a comparable adequate bundle of goods and services.

Keeping benefits up-to-date with wage growth reflects the belief that the relevant criterion for setting Social Security benefits is a relative — not an absolute — level of consumption. That is, the amount of income people have in retirement should provide a base on which they can accumulate enough to maintain their pre-retirement standard of living.

As shown on the next page, these two alternative methods of adjusting benefits produce very different outcomes.

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The Mechanics

Under current law, initial benefits received by each group of new retirees rise at the rate of wage growth. (After retirement, benefits rise annually in line with inflation.) 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:

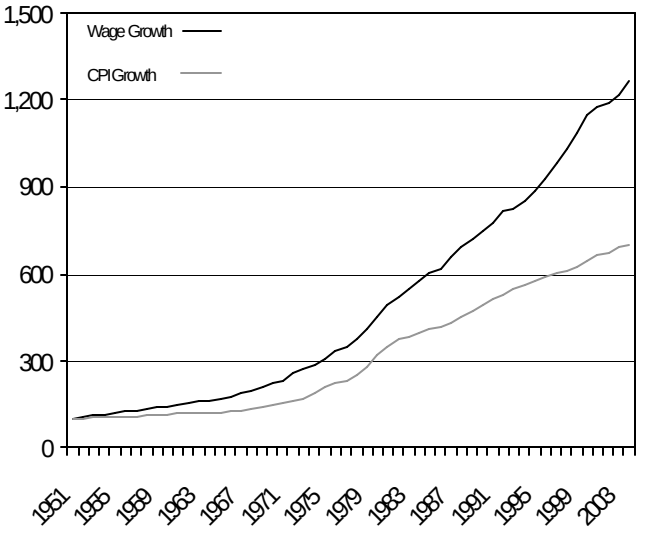
- 90 percent of the worker's first $627 of Average Indexed Monthly Earnings, plus
- 32 percent of indexed monthly earnings between $627 and $3,779, plus
- 15 percent of any indexed monthly earnings in excess of $3,779.

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 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 the price indexing proposal, Average Indexed Monthly Earnings would continue to be calculated as just described. 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 (see Figure 1). 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.

FIGURE 1. WAGES INCREASE FASTER THAN PRICES

Wage Growth vs. Growth of Prices, 1951-2004



Source: Authors' calculations. The lines represent the value of $100 assuming it increased in line with the Average Wage Index or the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPIW). If Social Security benefits had been indexed to prices starting in 1951, today's average annual benefit would be about $ 7,950 instead of the actual $14,700.

Table 1 compares benefits and replacement rates under the current system and under one with price indexing.[2] (Note that benefits and replacement rates under the current system are already scheduled to decline under current law as a result of the increase in the normal retirement age from 65 to 67.) Price indexing produces annual benefits, in current dollars, equal to $12,558 for the indefinite future. Since real wages are rising, this benefit amount replaces a declining portion of pre-retirement earnings. According to the Social Security Administration, this decline in replacement rates more than eliminates the program's deficit over the next 75 years.

Table 1. Price Indexing would Produce Constant Real Benefits but Declining Replacement Rates

Year	Benefits for Average Earner (2005 dollars)		Replacement Rates (Percent)	
	Current System	Price Indexing	Current System	Price Indexing
2005	14,689	--	42	--
2025	16,205	12,558	37	28
2045	20,050	12,558	37	23
2065	24,805	12,558	37	18
2085	30,689	12,558	37	15

Source: Social Security Administration (2004). "Annual Statistical Supplement, 2003" and authors' calculations.

Implications for the Future

While price indexing stabilizes Social Security's finances, it sharply reduces the program's role as a source of retirement income. One could hope that people will respond to the scheduled benefit cuts by working longer or saving more on their own. Barring those favorable responses, however, two responses are possible. One possibility is a return to a system of ad hoc increases such as existed before the program was automatically indexed. The other is increased reliance on welfare programs.

A Return to Pre-1970s Social Security Program

Before the 1970s, the Social Security system had no automatic indexation. Initial benefits were not automatically kept up-to-date with wages; nor were benefits in retirement automatically increased to reflect changes in the Consumer Price Index. Instead, the Congress made frequent changes to benefits to keep them up-to-date with the economy.[3]

What "Price Indexing" of *Benefits* Is NOT

Do not read this section unless you are a techie. But a common misperception is that the proposed price indexing involves simply changing the index used for adjusting the worker's wage history and the "bend points" in the benefit formula. Current law indexes lifetime earnings and the "bend points" to wage growth. Intuitively, price indexation involves indexing these to the rate of growth of prices. Wrong. The intuitive procedure would "price index" the system, but it would not produce a benefit that increased in line with prices.

Adjusting past earnings by prices rather than wages would produce a smaller average indexed earnings amount and therefore an immediate reduction in benefits. During a transition period, average benefits would grow more slowly than average wages (the transition would last until all retirees were receiving benefits calculated under the new system), but then average benefits would again track average wages. Thus, price indexing earnings might be a useful approach if the goal were a one-shot cut in benefits with benefits growing in line with wages thereafter.

Indexing the bend points in the benefit formula to prices introduces a second effect. Average indexed earnings would rise faster than the brackets in the benefit formula and create "bracket creep." That is, each year an increasing proportion of earnings would fall in the 32 percent and 15 percent brackets and eventually, almost all earnings would end up in the top 15 percent bracket. Bracket creep would slow the growth of average benefits below the growth rate of average wages. However, after a very long transition period, virtually all earnings would end up in the top bracket, and then average benefits would again increase at roughly the same rate as average wages.

In short, the only way to have benefits increase in line with prices is to directly reduce the factors in the benefit formula as described in the text.

Before the 1970s, benefits were determined by using a table that related the basic benefit amounts to average wages in covered employment. Benefits in this table did not change unless Congress amended the law. But inflation and real wage growth routinely ate into the real value of these static benefits. In response, Congress routinely revised up the benefit amounts in the table. These periodic adjustments both restored lost purchasing power for retirees and provided higher initial benefits for new beneficiaries.

Hence, a system where benefits are price indexed and declining relative to wages opens the door to periodic adjustments by the Congress.

Increased Reliance on Means-Tested Benefits

The experience of the United Kingdom suggests an alternative response.[4] In 1980, the government changed the indexation of Britain's Basic State Pension, by far the nation's largest public pension program, to prices rather than wages. At the time of the change, this flat-rate benefit was 25 percent of average earnings. Middle and upper-income earners then supplement this basic pension with an employer-sponsored pension or a government earnings-related benefit, which the government also reduced.

Today, the Basic Pension provides the same basket of goods and services as it did in 1980. But as real earnings have grown about 2 percent per year, the Basic Pension has fallen to about 11 percent of average earnings. This level is well below the minimum income that Britain's means-tested welfare programs have traditionally assured the elderly — an amount roughly equal to 20 percent of average earnings. As a result, an increasing number of retired workers with little income other than the Basic Pension — primarily low-wage workers and those with sporadic employment histories — qualify for means-tested benefits. And, as the Basic State Pension is projected to replace just 7 percent of average earnings by 2030 and 6 percent by mid-century, an ever-larger share of the elderly will qualify for welfare benefits.[5]

The expansion of means-tested benefits, which followed directly from Britain's decision to price-index the Basic State Pension, created a powerful disincentive to save for retirement or to augment retirement income by working. This was because any income from savings or work reduced the recipient's means-tested benefits pound-for-pound. To counter this effect, the government cut the reduction in the means-tested benefits to 40-pence for each pound of income (a 40-percent reduction). Such a tapered withdrawal rate improves incentives. But it also brings a much larger portion of the population into the means-tested system. Currently, half the elderly in Britain qualify for an income supplement from the means-tested system. As the Basic State Pension declines relative to average earnings, this figure will rise. By mid-century, about three-quarters of the elderly at any point in time are projected to qualify for means-tested benefits. An even larger share will qualify by the end of their lives, because incomes decline relative to average earnings as retirees age.

Conclusion

The conclusion that emerges from this review of price indexing is that it creates a potentially unstable system. Price indexing does more than simply cut benefits below the amounts scheduled under current law, it cuts them more each year. Eventually benefits will become trivial relative to workers' earnings. If the goal is to restore balance to the Social Security program by cutting benefits, an across-the-board cut of 20 percent for those under age 55 or an increase in the normal retirement age to 70 would achieve the same result over the next 75 years without putting the system on a downward trajectory.

Endnotes

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

2 Table 1 uses a hypothetical worker with steady levels of pre-retirement earnings at 100 percent of the average wage index, which approximates the calculations for the "scaled medium earner" published in the 2004 Board of Trustees of the OASDI report, table VI.F11.

3 See Kollmann (2000) for a summary of the major legislative changes in Social Security.

4 Sass (2004) describes the origins and main reforms of the U.K. retirement system.

5 Government Actuary's Department, (2004).

References

Kollmann, Geoffrey. 2000. *Social Security: Summary of Major Changes in the Cash Benefits Program,* CRS Report for Congress RL30565 (Congressional Research Service).

Government Actuary's Department. 2004. *Update of the Government Actuary's Quinquennial Review of the National Insurance Fund as at April 2000* (http://www.gad.gov.uk/Social_Insurance/UK_social_insurance.htm).

Sass, Steven A. 2004. *Reforming The UK Retirement System: Privatization Plus A Safety Net.* Issue in Brief Number 3, Center for Retirement Research at Boston College.

Social Security Administration. 2004. *Annual Statistical Supplement, 2003*. Office of Policy (http://www.ssa.gov/policy/docs/statcomps/supplement/).

The Center for Retirement Research thanks its research partners for support of this project: CitiStreet, Prudential Financial, AMVESCAP, New York Life Investment Management, AARP, TIAA-CREF Institute, and AXA Financial.

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