

‘Price Indexing’ Initial Social Security Benefits

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The Bush administration has not yet proposed a specific Social Security reform plan, but speculation is rife that the administration is leaning toward “Model 2” from the President’s Commission to Strengthen Social Security. Model 2 included a change in the determination of individual benefits that is commonly but somewhat misleadingly referred to as “price indexing.”¹ Although it sounds innocuous, that change would reduce benefits far more than appears on the surface. For example, had that rule been fully in effect by 1983, at the time of the last major reform to Social Security, benefits for newly eligible retirees and disabled workers now would be almost 20 percent lower and continuing to decline relative to current law. This article explains how the price indexing proposal would work; shows the magnitude of the implied benefit cuts, which are excessive in our view; and indicates why it is a problematic method of reducing benefits even if benefit cuts of the same expected size were desired.

Under current law, initial retirement benefits are based on a worker’s average indexed monthly earnings. Average indexed monthly earnings (AIME) in turn, are determined by taking earnings in previous years and scaling them up by later national average wage growth.² The formula relating full benefits (the so-called primary insurance amount) to earnings is also indexed to average

¹This approach has also been employed in legislation filed by Sen. Lindsey Graham, R-S.C.

²More precisely, the wage indexing occurs through the year in which a worker turns 60, with later wages used on a nominal basis (unindexed). The initial benefit level is thus indexed to wage growth through age 60. After initial benefit determination, benefit increases are indexed to price growth. Price indexing of benefits begins after the year in which a worker turns 62. Thus, there is a gap (with no indexing to either wages or prices) that should be corrected — and could be addressed on a revenue-neutral basis if desired.

earnings.³ The result is that benefits for new retirees roughly keep pace with wage growth.⁴ Successive generations of retirees thus receive higher benefits because they had higher earnings — and paid higher payroll taxes — during their careers. That feature of the Social Security system makes sense, because a goal of Social Security is to ensure that a worker’s income does not drop too precipitously when the worker retires or is disabled and ceases to have earnings. A focus on how much of previous earnings are replaced by benefits, the “replacement rate,” recognizes the real world phenomenon by which families, having become accustomed to a given level of consumption, experience difficult adjustment problems with substantial declines in income upon retirement.

The price indexing proposal would alter the current system so that in determining the initial benefit level, benefits would keep pace only with price growth, not wage growth. Therefore, real benefit levels would be constant over time, rather than increasing in line with real wages. Because real wage growth is positive on average, the change would reduce initial benefit levels and the size of the reduction would increase over time.⁵ Under price indexing, if average real wages are 10 percent greater after 10 years, the roughly 10 percent benefit growth to keep pace with this wage growth would simply be removed. The provision thus is more accurately described as “real wage growth negating” than as “price indexing” because it cancels the benefit increases from real wage growth.⁶ Two implications are

³In 2005 the primary insurance amount is equal to 90 percent of the first \$627 of AIME; 32 percent of AIME over \$627 and up to \$3,779; and 15 percent of AIME over \$3,779. The “bend points” at which the 90 percent, 32 percent, and 15 percent factors apply are indexed to wage growth.

⁴Given the increases in the age for full benefits (the so-called normal retirement age) that were legislated in 1983, the replacement rates for given retirement ages are declining. The last such change occurs for those turning 62 in 2022.

⁵The 2004 Trustees Report projects long-term growth of prices of 3 percent per year and long-term growth of taxable wages of 4.1 percent per year, resulting in a growth of real wages of 1.1 percent per year. But real wage growth may turn out to be larger or smaller than that amount.

⁶More precisely, the proposal would multiply the 90 percent, 32 percent, and 15 percent factors used to compute the primary insurance amount by the ratio of cumulative price growth to cumulative wage growth between the start date and the year in which a worker becomes entitled to claim benefits. It is thus important to note that wage indexing would still be part of the determination of benefits.

A panel on which Diamond served in 1975-76 (Consultant Panel on Social Security and the Congressional Research Service) recommended a different and less severe form of price indexing than the one included in Model 2. In contrast to the

(Footnote continued on next page.)

Age when implemented	Change in scheduled benefits from this reform with 1 percent real wage growth	Change in scheduled benefits from this reform with 1.5 percent real wage growth
55	-0.0%	-0.0%
45	-9.6%	-14.0%
35	-18.2%	-26.1%
25	-26.0%	-36.5%
15	-33.1%	-45.4%
5	-39.5%	-53.0%
0	-42.5%	-56.4%

Note: Calculated as $1 - (0.99^{55-age})$ and $1 - (0.985^{55-age})$.

then immediately obvious. First, the longer the provision stays in effect, the larger the benefit cuts, assuming ongoing real wage gains. Second, the more rapid real wage growth, the larger the benefit cuts.

Assuming no benefit reductions for workers age 55 and over at the time any legislation is enacted, the reductions in benefits would be phased in starting with workers who were 54 at the time of legislation. For each additional year that a worker is younger than 55, the benefit formula is reduced by an additional amount

“real wage growth negating” proposal included in Model 2, the 1975-76 panel proposed calculating benefits relative to earnings with both measured in real terms, making no use of a wage index. Thus, if real wages increased, real benefits would also increase. To be sure, under this approach, average benefits would not have increased proportionally with earnings (that is, the average replacement rate would decline somewhat) because of the progressivity in the benefit formula. But *average benefits would still have increased in real terms, which would not occur under the Model 2 approach.* The form of price indexing proposed under Model 2 therefore is more severe than the one proposed by the 1975-76 panel.

Furthermore, it was widely recognized in the mid-1970s that the system then in place for setting benefit levels involved over-indexation and needed to be changed. The price indexing proposal of the panel in 1975-76 was one way to address this problem. Congress solved the problem in the 1977 Social Security legislation through an alternative approach. A discussion of wage and price indexing before enactment of the 1977 legislation is different from today, since today’s system does not have the fundamental flaw that the pre-1977 system did.

A final difference is also worth noting. At the time of the earlier panel, the magnitude of the actuarial imbalance was so severe that it was difficult to see how Congress could legislate sufficient benefit reductions or revenue increases to restore solvency to the system while adopting wage indexation. According to the 1975 Trustees’ Report, the actuarial deficit was 5.3 percent of payroll and the trust fund was projected to be exhausted in five years. By 1976, the actuarial deficit had risen to 8.0 percent, with a slightly later projected exhaustion. (The severity of the projected imbalance at that time was underscored by the fact that the subsequent 1977 legislation was followed very shortly after by the 1983 legislation.) By contrast, the actuarial imbalance is now 1.9 percent of payroll and the projected date of trust fund exhaustion is nearly four decades away. Since the financial situation now is far less severe, a dramatic alteration in the system is neither necessary nor desirable.

	Unfunded obligation	Cost savings
Dollars in present value	\$3.7 trillion	\$4.0 trillion
Percent of payroll	1.8%	2.1%
Percent of GDP	0.7%	0.8%

Source: Table IV.B7 of Trustees Report for unfunded obligation. Authors’ extrapolation of OACT estimate for Model 2 for cost savings.

equal to the percentage of real wage growth of another year. Table 1 shows the size of benefit cuts, relative to scheduled benefits, from this proposal, assuming that real wage growth is 1 percent or 1.5 percent. Thus, a 35 year old at the time of legislation would have benefits reduced by 18.2 percent under the proposal if real wage growth is 1 percent annually. The benefit reduction for the 35 year old is much larger (26.1 percent) if real wage growth is 1.5 percent per year. The future benefit level for a newborn at the time of legislation would be reduced by 42.5 percent relative to the scheduled benefit level with 1 percent real wage growth and 56.4 percent with 1.5 percent real wage growth.⁷ The replacement rates from Social Security would be reduced by corresponding percentages. The role of the Social Security system in allowing the elderly to maintain their standard of living after retirement would thus decline sharply over time.

To be sure, reducing benefits saves money for Social Security. Indeed, use of that “real wage growth negating” provision would be more than sufficient, by itself, to eliminate the 75-year actuarial imbalance in Social Security. The present value of benefits after adopting this change would be lower than the present value of “payable benefits” — the level of benefits that could be paid using only existing revenue sources.

⁷Within the traditional 75-year horizon, the largest reduction in retirement benefits would occur for a worker reaching age 62 in 75 years. Of course, such a worker is not yet alive. For such a future worker, the reduction would be almost one-half with 1 percent real growth and nearly two-thirds with 1.5 percent growth.

	Ultimate percentage increase in real wages		
	0.6%	1.1%	1.6%
Actuarial balance as a percentage of taxable payroll	-2.42%	-1.89%	-1.35%
Year of combined trust fund exhaustion	2038	2042	2048

Source: Trustees Report 2004, Table VI.D4.

Moreover, because benefit levels are so much lower than scheduled benefits after 75 years and because further benefit reductions would follow in later years, the system would accrue increasingly larger surpluses over time with unchanging economic and demographic assumptions.⁸

As indicated above, if real wage growth is more rapid than expected, benefit cuts are *larger* under this approach. Yet if real wage growth is more rapid, the underlying 75-year actuarial deficit (without this provision) is smaller. The savings over 75 years under the current system from more rapid wage growth is demonstrated in the sensitivity analysis done by Social Security's Office of the Actuary (Table 3). The use of real wage negating is even more troubling than simply reducing benefits based on *expected* real wage growth today. The larger actual real wage growth turns out to be, the smaller the need for benefit reductions but the larger those reductions actually are under the real wage negating approach. In other words, the approach introduces variation in benefit reductions relative to scheduled benefits that are larger the less the financial need of Social Security for those reductions.

In summary, partially substituting price indexing for wage indexing in determining initial benefits represents a shift in the focus of Social Security away from its role in preserving living standards of workers and their families at times of retirement, disability, or death and to a lesser role of providing benefits that would, on average, lag increasingly behind earnings. That approach clearly shows the implications of trying to close the long-term Social Security actuarial deficit solely by benefit reductions. Although it incorporates only one particular pattern of how benefits could be reduced for workers born in different years, it illustrates the broader implications of closing the actuarial deficit purely by benefit reductions. Not surprisingly, such an approach involves dramatic reductions relative to scheduled benefits, including for

⁸While the unfunded obligation has also been calculated for an infinite horizon, the same has not been done for the effect of the real wage growth negating proposal. Because the system would have a large annual surplus in year 75 of the projection and benefit cuts would continue to grow, we believe the infinite horizon benefit cuts would be considerably larger than the unfunded obligation — perhaps one-third larger than the projected deficit — over an infinite horizon.

those beneficiaries with little or no ability to draw on an individual account, such as disabled beneficiaries and young survivors.

Why is the administration focused on large benefit cuts? Survey evidence suggests that the public would prefer tax increases (or some combination of tax increases and benefit reductions) to an exclusive reliance on benefit reductions.⁹ To be sure, Social Security needs some adjustments to remain financially healthy for the long term.¹⁰ But benefit reductions of this severity aren't necessary. Benefit reductions would not need to be that deep without the president's insistence that no additional revenue be raised to cushion the blow.

References

- Blinder, Alan S. and Alan B. Krueger. "What Does the Public Know about Economic Policy, and How Does It Know It?" *Brookings Papers on Economic Activity* 1:2004, pp. 327-387.
- Diamond, Peter A. and Peter R. Orszag. 2004. *Saving Social Security: A Balanced Approach*. Washington: Brookings Institution Press.

⁹In one recent survey, 30 percent of respondents answered that they would prefer to eliminate the Social Security deficit "mainly by raising the payroll tax"; 5 percent responded "mainly by reducing Social Security benefits"; and 34 percent responded "both." Blinder and Krueger (2004).

¹⁰For a plan that combines revenue increases along with benefit cuts to achieve sustainable solvency, see Diamond and Orszag (2004).