

ISSUE BRIEF NO. 5

SOCIAL SECURITY REFORM: STRATEGIES FOR PROGRESSIVE BENEFIT ADJUSTMENTS

INTRODUCTION

This is the fifth in a series of Treasury issue briefs on topics related to Social Security reform. The fundamental reason Social Security must be reformed is that scheduled benefits under current law exceed the future revenues that the system is projected to take in. Specifically, scheduled benefits have a present value that is \$13.6 trillion greater than the present value of the revenues that the system is projected to receive. Relative to scheduled benefits and taxes, therefore, the present value of benefits less taxes must be reduced by \$13.6 trillion. This can be done by increasing revenues relative to what is provided for under current law and/or by lowering benefits relative to what are currently scheduled but not fully payable under current law.

This brief discusses the possible role that progressive reductions in scheduled benefits would play in Social Security reform. A progressive reduction in scheduled benefits would have high earners bear a relatively larger share of the burden of the adjustments needed to make Social Security permanently solvent, while workers with low earnings would be relatively shielded from the impact of benefit reductions. Under such a change, the reduction in scheduled benefits expressed as a share of wages while working would be higher for high-wage workers than it is for low-wage workers. While there is considerable disagreement about the precise nature and timing of the reforms that will ultimately make Social Security solvent, there is broad agreement that progressive benefit adjustments will be a key component of those reforms. Indeed, most proposed reforms to move Social Security toward permanent solvency call for benefit changes of this type.¹

An important theme of this brief is that all plans that progressively reduce the growth rate of benefits operate in essentially the same way. Plans differ with regard to how rapidly and how progressively benefits are reduced, but the key levers used to slow the growth of benefits are the same.

Two points should be kept in mind in considering plans that involve changes to scheduled benefits. The first point is that currently scheduled benefits cannot actually be paid under current law since Social Security is projected to have insufficient funds to pay scheduled benefits from 2041 on. Paying currently scheduled benefits would require additional revenues. Comparing benefits in a solvent plan with an unpayable level of benefits in an insolvent plan is potentially misleading. The second point is that pro-

¹ For example, this is true of plans proposed by Jeffrey Liebman, Maya MacGuineas, and Andrew Samwick (<http://www.nonpartisansspn.com/pages/1/index.htm>); by Peter Diamond and Peter Orszag (http://www.ssa.gov/OACT/solvency/DiamondOrszag_20031008.pdf); and by Robert Pozen (http://www.ssa.gov/OACT/solvency/RPozen_20050210.pdf).

posals to reduce scheduled benefits typically do not actually cut benefits in either nominal or real terms; benefits of successive birth cohorts continue to grow over time, but at a slower rate than the benefits scheduled under current law. In other words, future retirees would receive benefits that are at least as large in real terms as what is received by current retirees; the benefits would just not be as large as what is now scheduled but not payable.

Reforms that bring the system into balance by slowing benefit growth (that is, reducing scheduled benefits) have the potential to be fairer to future generations than comparable reforms that achieve solvency by raising taxes. This is because the tax approach would result in a much larger increase in attempted pre-funding as more resources are brought into the system in advance of when benefits are paid. As discussed in issue briefs 3 and 4, prefunding provides resources for future generations only if the increased revenues brought into the Social Security program do not give rise to higher spending and/or lower taxes in the rest of the budget. If the increased surplus revenues are offset by larger deficits in the rest of the budget, the surpluses would not increase the government's capacity to pay future Social Security benefits and the attempt to make older workers pay a reasonable share of the reform burden through tax increases would be undone: While Social Security would be made fairer to future generations, that effect would be entirely offset by a non-Social Security fiscal policy that places a greater fiscal burden on future generations. A reduction in the growth rate of benefits, on the other hand, relies less on pre-funding to make Social Security fair across generations and is therefore less subject to this problem.

Another reason why many Social Security reform plans propose reductions in scheduled growth of benefits is to ensure that all workers bear a reasonable portion of the burden of Social Security reform. If Social Security were made solvent with tax increases alone, the tax increases would have to be large and abrupt if workers in the middle of their lives at the time of reform are to shoulder a reasonable share of the reform burden. For example, a worker aged 35 when reform is implemented would face higher payroll taxes for two-thirds of his working life, whereas a 20 year old would face higher payroll taxes for his entire working life. By contrast, these two workers would make the same contribution to a reform that involves reducing the benefits they are scheduled to receive in retirement so long as the benefit adjustments are fully phased in by time the older worker retires.

Treasury's second and third issue briefs developed a practical framework for designing and evaluating Social Security reform plans that is built around specific metrics for assessing the effect that reforms would have on fairness across generations, fairness within generations, and benefit adequacy. Those metrics can be used to assess reforms that yield a permanently solvent system. Changes in scheduled benefits must typically be combined with other reforms to yield a permanently solvent system. As the other parts of a plan might be progressive or regressive, the overall plan must be evaluated to fully quantify the level of progressivity brought about from the reform. It could be, for example, that benefit changes in a plan improve progressivity but that this is offset by other provisions.

This last observation highlights the value of the "top-down" approach to Social Security reform set forward in Treasury's previous issue briefs. A "top-down" approach to Social Security reform begins by laying down high-level measurable goals relating to how the reform burden is allocated across and within generations, the level of benefits, and how pre-funding is to be attempted. Once those goals are defined, it is then possible to construct a package of reforms that achieves them. In general, it will be possible to find more than one package of reforms that achieves a particular set of high-level reform goals; the choice among such plans must therefore be made with reference to other, less essential considerations.

In contrast, what might be called a “bottom-up” approach to Social Security reform would entail selecting reform elements from a list of specific modifications to benefits and revenues and then evaluating the impact of the choices on Social Security’s finances.² A bottom-up reform plan would be devised by selecting enough items from such a list to reach a solvency target.

BENEFIT DETERMINATION UNDER CURRENT LAW

Before considering the various ways in which progressive adjustments to benefits can be implemented, it is useful to begin with a review of how Social Security retirement benefits are computed under current law.

There are three steps involved in computing initial benefits under Social Security. First, a special average of the individual’s taxable earnings while working is calculated; this average earnings measure is known as average indexed monthly earnings, or AIME.³ Second, a progressive formula is used to convert the AIME into a primary insurance amount, or PIA. Third, initial benefits are determined by adjusting the PIA for retirement before or after the normal retirement age and adjusting for price inflation between age 62 and the time the individual begins collecting benefits. After benefit payments commence, they are then adjusted for price inflation each January.

Steps one and two of the benefit calculation involve indexing individual earnings and key parameters of the benefit formula to a measure of economy-wide average wages. First, in computing the AIME, an individual’s annual taxable earnings prior to age 60 are indexed to the growth of economy-wide average wages between the time the earnings were received and the time the individual is age 60. For example, if economy-wide average wages in the year an individual is age 40 are half as large as economy-wide average wages in the year the individual is age 60, then the individual’s age-40 earnings are scaled to be twice as large. Indexed earnings prior to age 60 and actual earnings after age 60 are referred to collectively as “indexed taxable earnings,” with the AIME computed as the average of the highest 35 years of indexed covered earnings divided by 12.

Second, the formula relating an individual’s AIME to his or her primary insurance amount changes every year in accordance with changes in the economy-wide average wage. This formula is illustrated in figure 1. It has three linear segments; specifically:

- For AIME between zero and 22 percent of the economy-wide average wage in the year a new beneficiary is age 60, the PIA increases by 90 cents for each additional dollar of AIME;
- For AIME between 22 and 131 percent of the economy-wide average wage in the year a new beneficiary is age 60, the PIA increases by 32 cents for each additional dollar of AIME; and,
- For higher levels of AIME, the PIA increases by 15 cents for each additional dollar of AIME.⁴

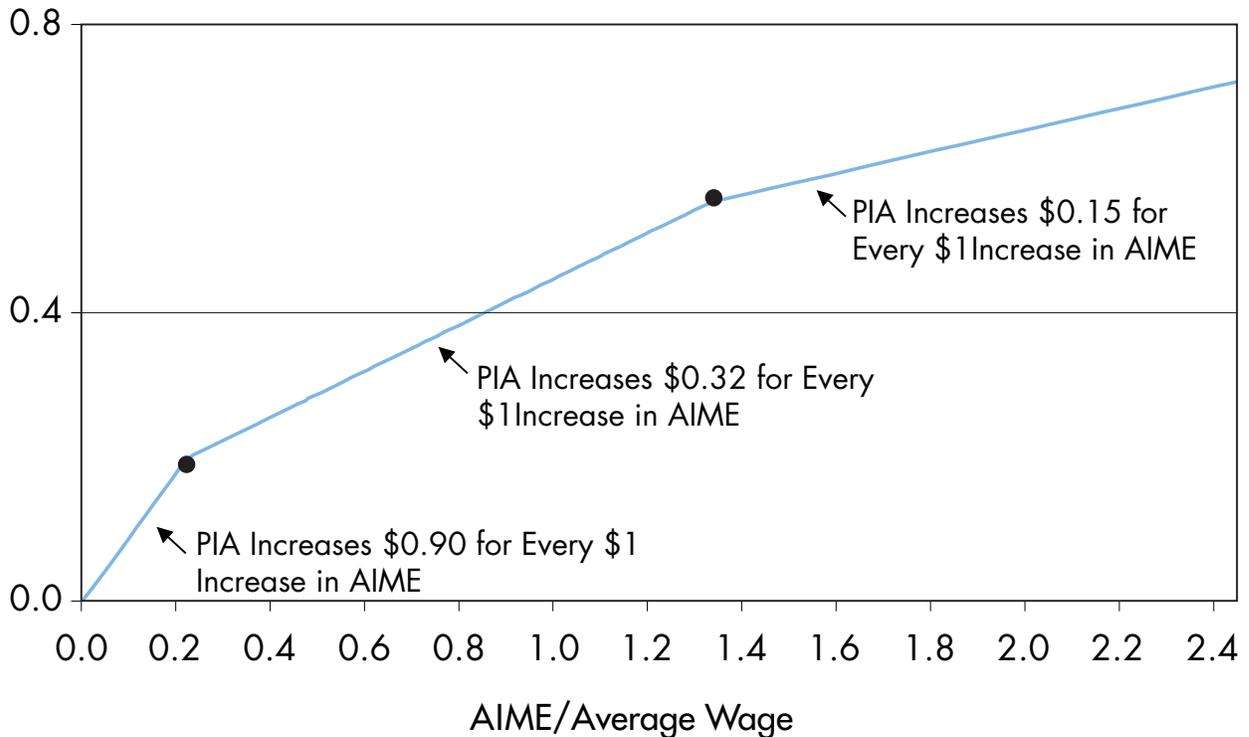
2 For example, such a list can be found at the Social Security Administration’s web site: <http://www.ssa.gov/OACT/solvency/provisions/index.html>.

3 Under Social Security, annual earnings are taxed up to a maximum level (\$102,000 in 2008); “taxable earnings” therefore refers to earnings that are below this level. This taxable maximum is indexed to the growth of economy-wide average wages.

4 Since only earnings below the taxable maximum are included in the AIME computation, there is a maximum PIA that can be obtained in any given year (it is the PIA that corresponds to the AIME of a worker whose earnings were at or above the taxable maximum for 35 or more years).

Figure 1: Current-Law Primary Insurance Amount Formula

PIA/Average Wage



Source: Department of the Treasury

The AIME level at which the slope of the PIA formula changes is referred to as a bend point, while the slope of a linear segment of the formula between bend points is referred to as a PIA multiplication factor. The fact that the multiplication factors get smaller for successive AIME ranges is what makes Social Security's benefit formula progressive; specifically, each additional dollar of AIME starts out by yielding 90 cents in initial benefits, then 32 cents, and finally 15 cents. The absolute levels of the bend points are indexed to economy-wide average wages; hence, if the AIME and PIA values are expressed as a share of economy-wide average wages in the year that a new beneficiary is age 60—as is done in Figure 1 then the resulting benefit formula will be the same for every birth cohort.

DIRECT APPROACHES TO BENEFIT ADJUSTMENT

A straightforward way to adjust benefits involves directly changing the parameters of the benefit formula. For example, reducing the multiplication factors used to translate average indexed monthly earnings into the primary insurance amount would lower initial benefits for any recipient, as each dollar of lifetime average earnings would make a smaller contribution to initial benefits. Moreover, changes to the multiplication factors can be done in such a way as to enhance the progressivity of the benefit formula by making larger proportional reductions to the factors that apply to higher levels of AIME, as this would imply that the reduction in the contribution of AIME to benefits would be largest for workers with high average lifetime earnings. For instance, a reform plan proposed by Peter Diamond and Peter Orszag includes a reduction in the top multiplication factor in the PIA formula from 15 percent to 10 percent; this would reduce benefits for an individual with an AIME level greater than greater than the second bend point (131 percent of the average wage in the year the individual turned 60) and would have lowered benefits for

roughly the top fifth of new retirees in 2007. Likewise, the Nonpartisan Reform Plan proposed by Jeffrey Liebman, Maya MacGuineas, and Andrew Samwick calls for cutting the top and middle factors in half (from 15 percent and 32 percent to 7.5 percent and 16 percent, respectively), while the bottom PIA factor would only be reduced by a quarter (from 90 percent to 67.6 percent).

An assessment of whether the adjustments to the benefit formula in a particular reform plans result in a more progressive Social Security system depends on an analysis of a complete proposal that makes Social Security permanently solvent. This would include not only benefit adjustments, but also revenue changes and any benefits payable from potential personal retirement accounts. The Diamond-Orszag and Liebman-MacGuineas-Samwick plans contain elements in addition to benefit adjustments—such as increases in the maximum taxable earnings base (both plans) and personal retirement accounts (the latter only)—that will affect Social Security’s overall progressivity.

MOVING FROM WAGE TO PRICE INDEXING

Under the current-law benefit computation, new initial retirement benefits for successive birth cohorts tend to grow at the same rate as economy-wide average wages. Over time, nominal wage growth will tend to outpace price inflation: The growth rate of real wages (wages adjusted for price changes) tends to be positive, as productivity gains result in a higher real wage. Hence, one way to reduce the growth of benefits involves modifying the benefit computation so that new benefit awards for successive birth cohorts tend to grow with *prices* rather than with wages. This reform proposal is known as *price indexing*.

Labeling this strategy for reducing the benefit growth rate as “price indexing” is confusing in that it incorrectly suggests that the procedures for calculating benefits under current law that employ wage indexation would be modified to use price indexation instead. In fact, all aspects of current law that rely on wage indexation would be unchanged under price indexing. What *would* change is that benefits as defined by current law would be multiplied by the ratio of economy-wide average real wages in a base year to economy-wide average real wages in the year the individual turns 60—that is, benefits would simply be scaled down by the amount by which nominal wages have outpaced prices. Current projections are that economy-wide average real wages will grow at about 1.1 percent per year; thus, in this case price indexing reduces future benefits from scheduled current-law levels by 1.1 percent for the first birth cohort affected, by 2.2 percent for the second birth cohort affected, and so on.

For example, consider two people, A and B, whose wages in each year of working life are equal to economy-wide average wages and who retire and collect benefits at the same age. If A is a member of the 1925 birth cohort and B is a member of the 1930 birth cohort, then under current law B’s benefit would be 25 percent higher than A’s benefit, where 25 percent represents the growth in economy-wide average wages during the five-year period that extends from 1985 (when A is age 60) to 1990 (when B is age 60). Alternatively, if price indexing had been in effect for these two birth cohorts, B’s benefit would have been 21 percent higher than A’s, where 21 percent represents the growth in *prices* between 1985 and 1990. These same calculations would apply if A and B were at any other point in the relative distribution of wages for their respective birth cohorts; for example, if they each earned 1-1/2 times economy-wide average earnings in each year of their working lives.

PRICE INDEXING REDUCES PROGRESSIVITY OF THE LIFETIME BENEFIT RATE

As was discussed in Treasury’s second and third issue briefs, the within-generation fairness of a set of reforms can be assessed with reference to the effect that it has on the *lifetime net benefit rate*. For an individual, the lifetime net benefit rate is defined as the present value of net lifetime Social Security benefits (benefits less taxes) as a percentage of the present value of the individual’s lifetime wages. Social Security is progressive to the extent that the lifetime net benefit rate declines with the level of lifetime wages earned.

Because price indexing is an across-the-board proportional benefit reduction for each birth cohort, with the proportional reduction becoming ever larger for successive birth cohorts, making Social Security permanently solvent with price indexing alone would cause Social Security to become increasingly less progressive over time. This occurs because current-law scheduled benefits as a share of lifetime wages are larger the lower are lifetime wages, so a given proportional reduction in benefits from current-law levels represents a larger share of lifetime wages for a low-wage worker than for a high-wage worker.

PRICE INDEXING PROVIDES A WAY TO TRANSITION TO A SOLVENT SYSTEM

Under current law, benefits of successive birth cohorts tend to grow at the same rate as economy-wide average wages. As noted above, these scheduled benefits cannot be paid under current law. Nevertheless, in the long run benefits would be expected to grow at the same rate as average wages under a reformed defined-benefit-only system that is fair, permanently solvent, and has a constant payroll tax rate. Taxes paid by successive birth cohorts in such a system grow with wages, so intergenerational fairness implies that benefits likewise would grow with wages once a reduction in benefits (compared to what was scheduled but not payable) that achieves solvency has fully phased in.

Under price indexing and an unchanging payroll tax rate, the real present value of lifetime benefits for successive birth cohorts would tend to grow only because of increasing longevity (at about 0.2 percent per cohort) while the real present value of taxes paid into Social Security would grow at the same rate as real wages (1 percent or more per cohort). Maintaining price indexing indefinitely, therefore, would result in a declining lifetime net benefit rate for successive cohorts (benefits would be rising less rapidly than taxes), a situation that most would view as being unfair to distant future generations.

As a result, price indexing can be thought of as providing a way to *transition* to lower benefits so as to help make Social Security permanently solvent. This is why, when price indexing was examined in Treasury's third issue brief, price indexing was assumed to be in place only between 2009 and 2036. To obtain a fair reform plan, price indexing was then combined with an additional reform that scaled down the benefit formula to offset the effect of increasing longevity ("longevity indexing") after 2036. It is only during the first 28 years of the reform when pure price indexing is in effect that the lifetime net benefit rate by birth cohort declines; after that time, longevity indexing serves to maintain an unchanging lifetime net benefit rate.⁵

PRICE INDEXING VERSUS WAGE INDEXING

Some critics of the current-law benefit calculation point out that it yields an AIME that is larger than it would be if it were simply computed as an average of real wages earned, and conclude that benefits are therefore "too high" in some sense. But this conclusion is not correct, because the PIA formula is itself calibrated to how the AIME is computed. Suppose, for example, that the AIME as currently computed is x percent higher on average than if it were instead computed as the simple average of real earnings (as would result if wages were indexed to prices when computing the AIME). In this case, imagine an alternative system in which the AIME is the simple average of the highest 35 years of earnings and the PIA formula is as depicted in Figure 1 except that the bend points as a share of the average wage are x percent smaller and the PIA multiplication factors are all x percent larger. Then benefits would be the same on average under this alternative system as they are under current law: AIME levels would be smaller than they are under current law, but recalibrating the PIA formula to take account of the new lower AIME levels would cause benefits to be the same on average.⁶

5 As was noted in Treasury's third issue brief, this plan was intended to be used for illustration only.

6 While benefits under this scheme would be the same on average as they are under current law, there would be distributional consequences—in particular, wage indexing puts relatively more weight on early-life earnings in the AIME calculation than does price indexing.

Moreover, this argument makes clear that the reliance on wage indexation under current law does not cause the benefits of successive birth cohorts to grow at the same rate as wages. This would remain true in the event that the AIME were calculated using price indexing rather than wage indexing.

To reinforce these points, imagine another possible benefit calculation. Suppose the AIME were calculated as the hypothetical account balance that would result if payroll taxes were invested at some fixed rate of return, and consider individuals who pay taxes at a 10.6 percent rate for exactly 35 years. If the annual rate of return credited to the hypothetical account were equal to the annual rate of economy-wide wage growth, it turns out that the resulting account balance would be close to 45 times the current-law AIME for all such individuals. If in addition the PIA bend points were made larger by a factor of 45 and the PIA multiplication factors were all made smaller by a factor of $.022 (= 1 \div 45)$, then benefits in this alternative system would be close to current-law levels.⁷

Wage indexing is also used to update the PIA formula each year. In Figure 1, the bend points are constant as a share of economy-wide average wages in the year the cohort is age 60, which means that the bend points in absolute dollars are growing at the same rate as economy-wide average wages—the bend points are indexed to average wages. This is necessary in order to maintain Social Security’s progressivity. If the bend points were not indexed, then the share of AIMEs that receive the advantage of the high PIA multiplication factors would decline over time. Indeed, if the benefit formula were neither regressive nor progressive by wage level, there would be only one PIA multiplication factor and no bend points to index.

PROGRESSIVE PRICE INDEXING

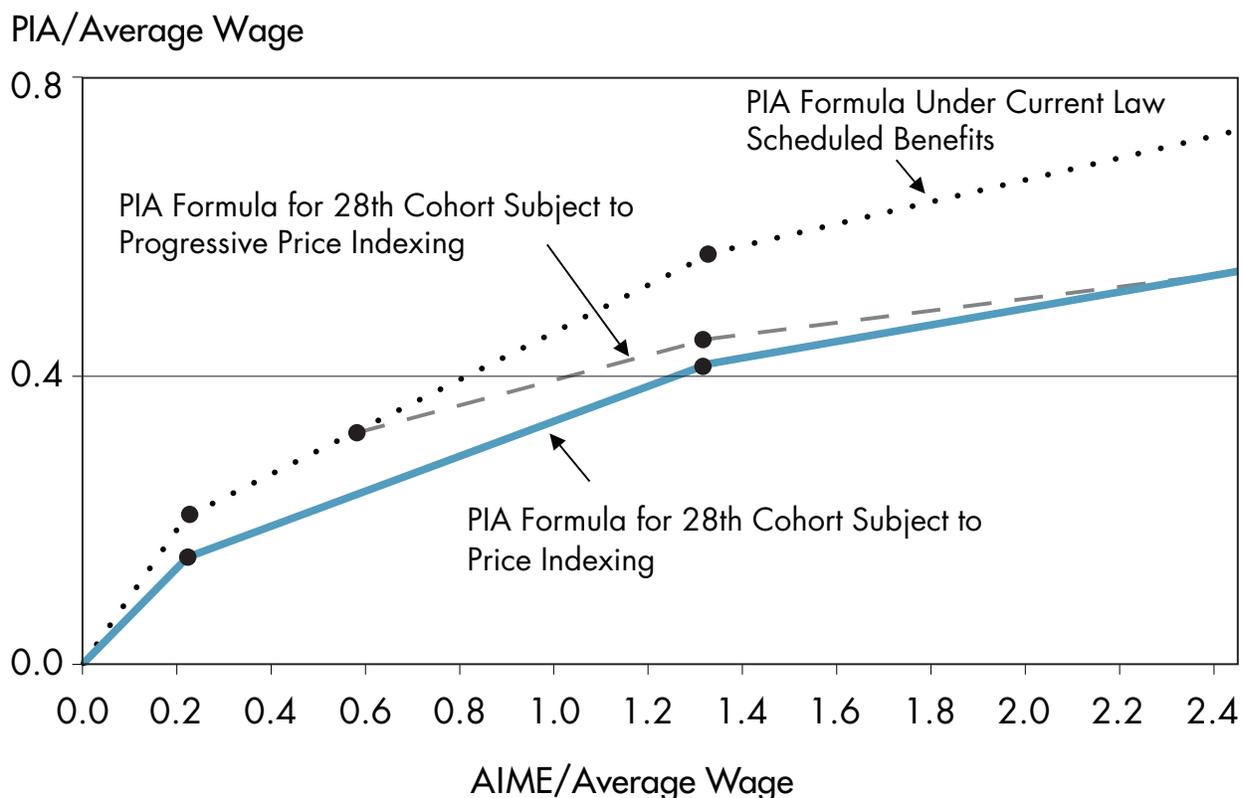
Progressive price indexing is a modification of the price indexing proposal that preserves and possibly even enhances Social Security’s progressivity.

HOW PROGRESSIVE PRICE INDEXING WORKS

Like pure price indexing, progressive price indexing represents a modification to Social Security’s PIA formula. It is therefore not fundamentally different from other reforms that reduce the rate of growth of defined benefits; it only implements the reductions in a particular way. Specifically, while most other plans simply dictate specific reductions in the PIA multiplication factors in specific years, progressive price indexing ties the reductions to the evolution of average economy-wide real wages. Given a path of economy-wide real wages, therefore, it would be possible to exactly mimic the effects of progressive price indexing on benefits by making direct adjustments to the parameters of the benefit formula.

Figure 2 plots the PIA formula that would result under progressive price indexing for the 28th birth cohort subject to this proposal under the assumption that economy-wide average real wages grow at an annual rate of 1.1 percent. For comparison, the figure also includes the PIA formula under current law and under pure price indexing (again for the 28th birth cohort subject to pure price indexing). The 28th cohort is chosen for this illustration because it is the last cohort subject to pure price indexing under the illustrative reform plan in Treasury’s third issue brief (which involves pure price indexing between 2009 and 2036 and longevity indexing after 2036).

⁷ Benefits in this alternative system would not be exactly the same as they are under current law for two reasons. First, the hypothetical account balance would increase if taxes were paid for more than 35 years. Second, current law indexes only wages earned prior to age 60, which corresponds to a hypothetical account that receives no interest credit after age 60.

Figure 2: Primary Insurance Amount Formula

Source: Department of the Treasury

Under pure price indexing, the PIA multiplication factors become smaller at the rate of 1.1 percent per year (the rate of growth of real wages), or 26 percent in total over 28 years. Reducing all multiplication factors by 26 percent reduces everyone's benefit by 26 percent relative to current-law scheduled benefits. Under progressive price indexing:

- A third PIA bend point is introduced between the first and second current-law bend points (at an AIME level equal to 57 percent of the average wage);
- The PIA multiplication factors for the first two AIME regions are held fixed at their current-law levels (0.90 and 0.32, respectively); and,
- The PIA multiplication factors for the third and fourth AIME regions (initially set equal to 0.32 and 0.15, respectively) are both reduced proportionately so that an individual with maximum taxable earnings in 35 or more years (a "maximum" earner with AIME about 2.4 times as large as average earnings) receives the same benefit as would result under pure price indexing.

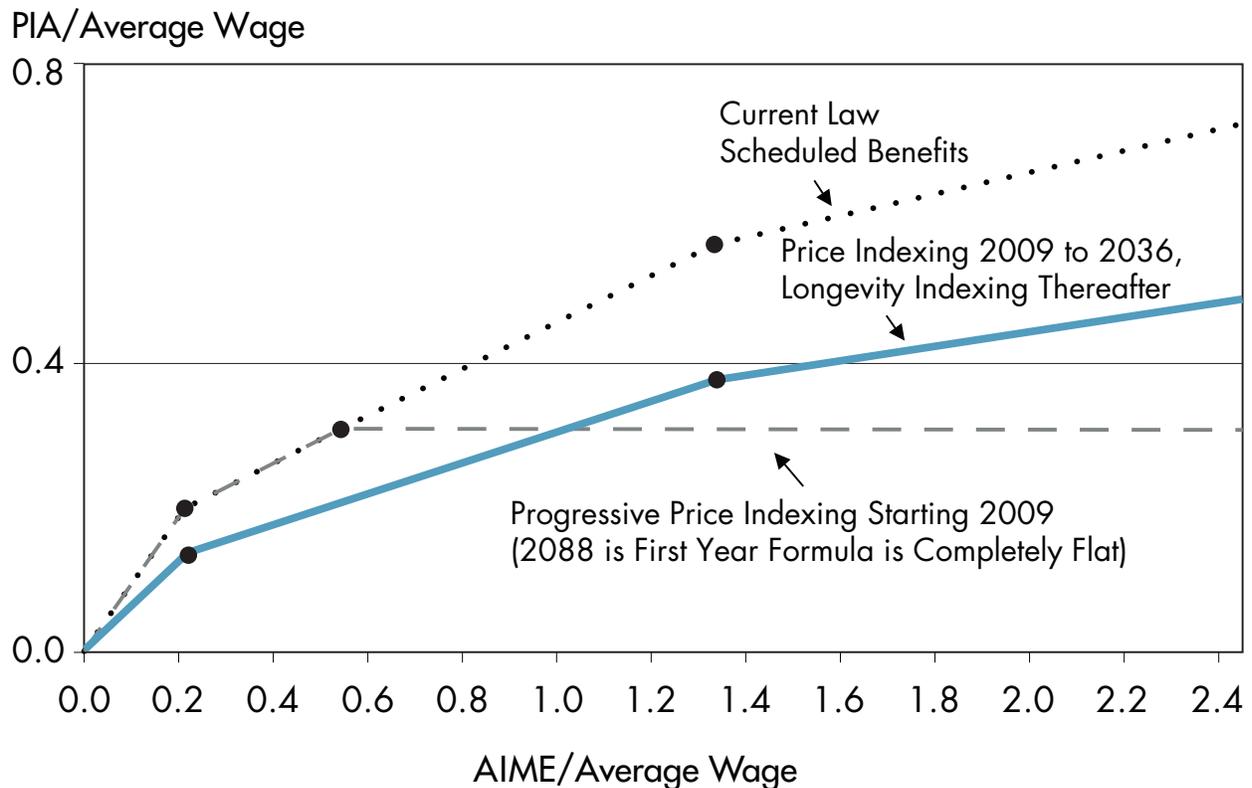
Relative to pure price indexing, progressive price indexing leads to higher real benefits over time for everyone except the less than one percent share of workers who are maximum earners. The bottom 30 percent of earners will not see changes in benefits from what is now scheduled. In between the bottom 30 percent and the top one percent, the reduction relative to scheduled benefits is larger as earnings rise so that people with higher lifetime earnings will bear more of the burden of reform than people with lower lifetime earnings. Progressive price indexing thus results in a more progressive benefit formula than pure price indexing.

The retirement benefits of the bottom 30 percent of earners would not be changed from what is now scheduled because it is estimated that 30 percent of recent new-benefit awards are to workers with an AIME level that is below the second bend point of the PIA formula under progressive price indexing. Hence, assuming the distribution of real wages across birth cohort members will remain about unchanged, progressive price indexing maintains current-law scheduled benefits for roughly the lowest 30 percent of workers, and reduces benefits relative to their current-law scheduled levels for about the top 70 percent of earners.

PROGRESSIVE PRICE INDEXING DOES NOT BY ITSELF MAKE SOCIAL SECURITY PERMANENTLY SOLVENT

As with pure price indexing, progressive price indexing is a means of phasing in a reduction in benefits (relative to what is scheduled but not payable) so as to help make Social Security permanently solvent. There is a limit, however, to how long progressive price indexing can be left in place without problematic consequences arising. If annual real wage growth were to average 1.1 percent, for example, this limit turns out to be 80 years. In that year, the PIA formula shown in Figure 3 is flat for levels of AIME that are greater than the second bend point. If progressive price indexing were continued after 80 years, the PIA would actually decline as AIME rises beyond the second bend point. Many would view this as an unacceptable outcome because it implies that increases in average indexed monthly earnings past the second bend point would actually result in a lower Social Security benefit.

Figure 3: Primary Insurance Amount Formula For Cohort Turning 62 in 2088



Source: Department of the Treasury

When the PIA formula becomes flat for levels of AIME above the second bend point, all workers whose AIME falls in this region of the benefits formula (about 70 percent of workers under current projections) would receive the same benefit despite the fact that the present value of lifetime payroll taxes paid tends to be higher the higher is one's AIME.⁸

After progressive price indexing has run its course, one possibility would be to leave the PIA formula (shown in Figure 3) unchanged except that benefits would be reduced proportionately for successive birth cohorts so as to offset the effect of increasing longevity on the value of lifetime benefits. Unfortunately, this plan—progressive price indexing plus longevity indexing—would not make Social Security permanently solvent. Over 75 years, this plan has been estimated to close about 80 percent of Social Security's financial shortfall.⁹ Those estimates show Social Security's deficit in the 75th and final year of the projection period equaling about 1.1 percent of covered payroll, or 7 percent of benefits paid. If the imbalance in all later years were to persist at 1.1 percent of covered payroll, which is a reasonable assumption given that longevity indexing would be in place, then the infinite-horizon imbalance would also be reduced by about 80 percent.

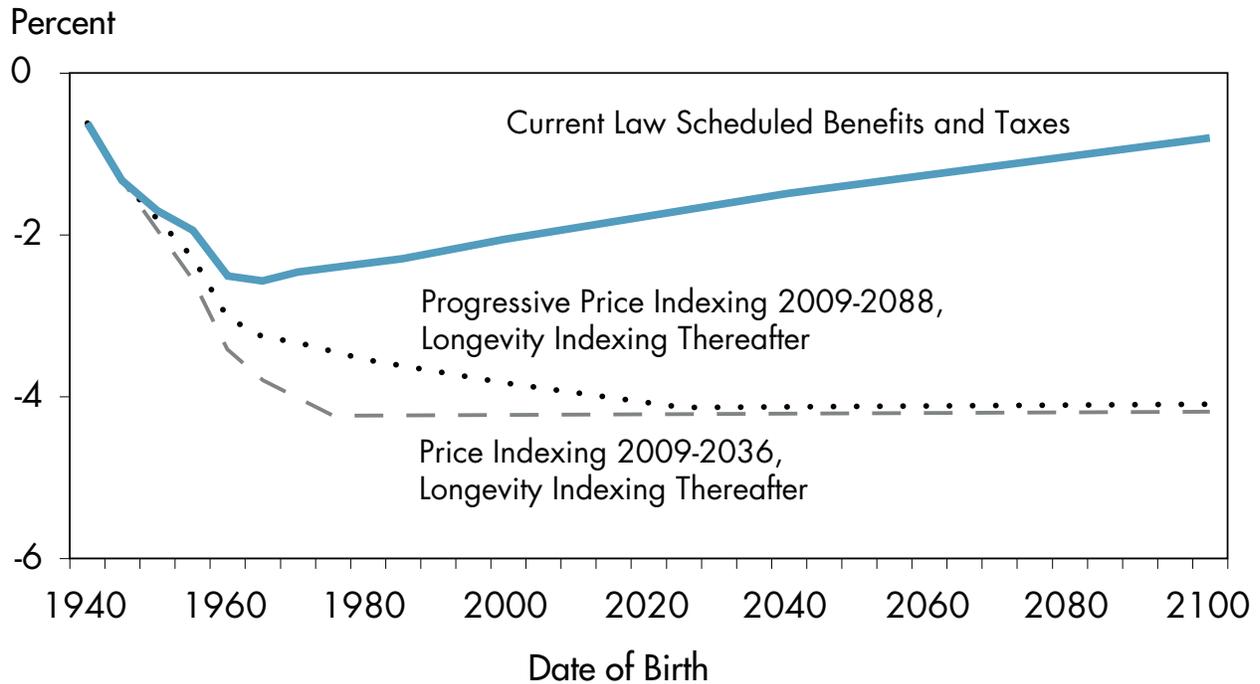
Why progressive price indexing cannot by itself make Social Security permanently solvent can be understood by considering the lifetime net benefit rate by birth cohort. As was explained in Treasury's first issue brief, current and future workers must pay into Social Security about \$13.6 trillion more than they get back in benefits in order to finance the net benefits (benefits less taxes) that the system has paid or promised to earlier birth cohorts. The implication is that making Social Security permanently solvent requires that the lifetime net benefit rate be substantially negative for current and future workers.

Figure 4 shows estimates of the lifetime net benefit rate by birth cohort under progressive price indexing plus longevity indexing, as well as under pure price indexing plus longevity indexing (which was judged to be about permanently solvent in Treasury's third issue brief). The fact that the plan with progressive price indexing conveys a larger lifetime net benefit rate for all cohorts subject to reform (henceforth, the "reform cohorts") implies that it levies less net tax from reform cohorts than does the plan with pure price indexing. This reflects the fact that progressive indexing involves a smaller reduction in scheduled benefits for nearly all retirees than pure price indexing—the 30 percent of earners at the bottom would see no change at all, while nearly all of the rest would have a smaller reduction than under pure price indexing. Hence, if the plan with pure price indexing is just solvent, the plan with progressive price indexing must be less than solvent.

8 The present value of lifetime taxes paid would tend to be proportional to AIME if there were no systematic relationship between average lifetime earnings and the timing of earnings over working life. Alternatively, if people with relatively high lifetime earnings tend to earn a relatively larger portion of those earnings late in life, then the present value of lifetime payroll taxes would increase less than proportionately with the AIME. In either case, there would be a positive association between AIME and the present value of taxes paid.

9 Social Security's score of progressive price indexing beginning in 2012 is at <http://www.ssa.gov/OACT/solvency/provisions/benefitlevel.html>. The scoring assumes progressive indexing of both retirement benefits and disability benefits. If progressive indexing were applied to only retirement benefits, it would close less of Social Security's financial shortfall.

Figure 4: OASI Lifetime Net Benefits As Percent of Lifetime Wages (Lifetime Net Benefit Rate) by Birth Cohort



* Estimates include only OASI payroll taxes and benefits. OASI taxes on benefits are not included.

Source: Department of the Treasury

Both of these plans result in a lifetime net benefit rate that is flat in the long run, which many would consider fair. Moreover, the long-run lifetime net benefit rate is about the same under either plan. What makes the plan with progressive price indexing less potent is its relatively slow phase-in: The first cohort subjected to the full brunt of reform is the 2026 birth cohort, while the 1974 birth cohort is fully subject to reform under the plan with pure price indexing.

Could the plan with progressive price indexing be modified to make it permanently solvent by phasing in its benefit reductions more rapidly? For example, one could imagine accelerating the evolution of the PIA formula by doubling the rate at which the PIA multiplication factors were reduced, in which case the PIA formula changes would be complete in the 40th year of the reform rather than after 80 years. However, this would lead to declining real benefits levels for successive cohorts of workers in much of the upper part of the wage distribution in future birth cohorts. For example, consider a maximum earner. If average real wages were to grow 1.1 percent annually, real benefits for a maximum earner would decline at a 1.1 percent rate for the first 40 reform cohorts and would then increase at a 0.9 percent annual rate (the assumed growth rate of real wages less 0.2 percentage point per year for longevity indexing) for later cohorts. A similar but less severe pattern would be evident for other earners in the upper part of the wage distribution. As a result, a more rapid phase in of progressive price indexing would require reductions in actual real benefit levels between successive cohorts over much of the income distribution—an outcome not envisioned in most Social Security reform proposals.

A plan with progressive price indexing would naturally phase in more rapidly if real wage growth were more rapid. For example, if real wage growth were to average 2 percent per year rather than 1.1 percent, the plan would be completely phased in after 44 years rather than after 80 years. Even in this unlikely event, however, the plan would not phase in as rapidly as a plan with pure price indexing, and so would not achieve permanent solvency.¹⁰

Because progressive price indexing cannot by itself make Social Security permanently solvent, it is not a complete plan and hence cannot be fully evaluated with respect to fairness and benefit adequacy. Before any such evaluation can be done, it would be necessary to specify the additional reforms that would be combined with progressive price indexing to make Social Security permanently solvent. Again, however, a key point to note about progressive price indexing is that it represents a way to adjust benefits that is quite similar to the approaches used in other reform plans.

CONCLUSION

There is widespread agreement that any reform to Social Security will involve adjustments to reduce benefits relative to what is currently scheduled but unpayable, and that these adjustments will fall relatively more heavily on high-income workers. There is likewise a consensus that workers with low lifetime earnings will be shielded from the burden of reform. While there are many ways to implement progressive benefit adjustments of this sort, the essential mechanics of any benefit adjustment are the same. In some proposals these mechanics are obvious because they make specific adjustments to the parameters of the benefit formula. It is less obvious—but no less true—for reform proposals such as progressive price indexing, where adjustments to the parameters of the benefit formula are tied changes to economic variables such as wage and price growth.

While progressive benefit adjustments will represent an important component of some future reform plan, they are unlikely to be the entire plan—that is, progressive adjustments to benefits will be combined with other reforms. Because these other reforms can also influence Social Security's overall progressivity, a meaningful assessment of the effect that proposed changes to benefits would have on Social Security's fairness across and within generations will need to specify those additional reforms.

10 The effect of real wage growth on real benefits while progressive price indexing is in effect can be understood with reference to three earnings groups: maximum earners, earners with AIME levels that are less than or equal to the second bend point, and earners with AIME levels that fall between the second bend point and the maximum AIME. Higher real wage growth has no effect on the absolute real benefits received by a maximum earner of any given birth cohort, but the real benefit expressed as a share of the average real wage will be smaller the higher is real wage growth. For earners with AIME levels that are less than or equal to the second bend point, absolute real benefits increase in lockstep with real wages, so the real benefit as a share of average real wages is unaffected. For earners with AIME levels that are between the second bend point and the maximum AIME, higher real wage growth increases real benefits, but the proportionate increase is less than the proportionate increase in real wages. Hence, higher real wage growth increases real benefits of all workers except maximum earners, but real benefits as a share of average real wages fall on average. And because real payroll taxes are proportional to real wages, higher real wage growth in any given year that progressive indexing is in effect will act to improve Social Security's long-term finances.