## A NEW SOCIAL SECURITY 'NOTCH'? BAD NEWS FOR PEOPLE BORN IN 1947

By Andrew G. Biggs\*

### Introduction

This year, Social Security benefits received no Costof-Living Adjustment (COLA) for the first time since automatic adjustments were adopted in 1975. While current beneficiaries perceive themselves to be harmed, they were compensated by receiving a higher-than-normal 5.8-percent COLA payment in 2009. However, a quirk in Social Security's benefit formula will produce lower benefits for new retirees, presenting a stronger case for help. Social Security's formula for granting COLAs, interacting with a spike in inflation during 2008, could reduce benefits for individuals born in 1947 by around 2.6 percent relative to the average benefits received by the 1930-1946 birth cohorts, costing a typical couple over \$12,000 over the course of their retirement. Policymakers should consider adjusting benefits for these individuals and implementing longer-term reforms to reduce the likelihood of future "notches."

This *brief* proceeds as follows. The first section describes the Social Security notch of the 1970s. The second section explains how Social Security's benefit formula works. The third section looks at how the experience of 2008 has created a new type of notch. The fourth section considers how replacement rates vary for different birth cohorts, and the fifth section

offers potential solutions. The final section concludes that some adjustment for the 1947 cohort is both popular and sensible.

# The Social Security Notch of the 1970s

The term "notch" derives from a series of changes in Social Security benefit rules in the 1970s that individuals born from 1917 through 1921 believed put them at a disadvantage.<sup>1</sup> Eventually, a bipartisan congressional commission concluded that the notch was small enough and justified enough on policy grounds that compensation was not warranted. The notch cohorts were not treated as generously by Social Security as were prior cohorts, but they did not receive lower benefits than were historically intended.<sup>2</sup> Nevertheless, since 1981, over 100 pieces of legislation have been proposed to compensate the notch cohorts<sup>3</sup> and several seniors groups sought contributions by claiming they could assist notch cohorts in receiving higher benefits.<sup>4</sup> A repeat of such an event, even on a smaller scale, would be undesirable.

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## Background on the Social Security Benefit Formula

The Social Security retirement program provides a progressive replacement of average pre-retirement earnings, meaning that lower earners receive larger payments relative to their lifetime earnings than higher earners. Pre-retirement earnings are represented by the individual's Average Indexed Monthly Earnings (AIME). The AIME is used to determine the Primary Insurance Amount (PIA), which is the basic benefit paid to a retiree at the Full Retirement Age (currently 66).

The AIME averages the highest 35 years of indexed earnings, and then divides the figure by 12 to produce a monthly amount. Indexing adjusts earnings in past years to make them comparable to average earnings as of age  $60.^5$  This adjustment expresses past earnings in terms of current standards of living. If, for instance, an individual earned one half the average wage in a past year, the indexed value of that wage would be equal to one half the average wage at the time the individual was age  $60.^6$  Importantly, earnings after age 60 are not indexed, but entered into the formula in nominal terms.<sup>7</sup>

Once the AIME is calculated, Social Security calculates the PIA. The PIA is currently equal to 90 percent of the first \$744 in average monthly earnings, 32 percent of earnings between \$744 and \$4,483, and 15 percent of earnings above \$4,483. These dollar amounts are referred to as "bend points" in the benefit formula and are increased each year at the rate of growth of the Average Wage Index.

The wage indexing of past earnings and of the bend points implies that initial retirement benefits will tend to rise from cohort to cohort at the rate of wage growth. This "wage indexing" of benefits is designed to keep replacement rates – the ratio of retirement benefits to pre-retirement earnings – roughly constant over time.<sup>8</sup> While replacement rates have varied over the course of Social Security's history, the current benefit formula implemented in 1977 has kept replacement rates relatively steady since then.

Once individuals start claiming, benefits are increased annually to maintain purchasing power in light of inflation. Social Security COLAs are calculated every October by comparing the third-quarter data of the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) with the previous year's figures.<sup>9</sup> An increase in the CPI produces a COLA paid the following January for retirees and other Social Security beneficiaries. When changes in the CPI are negative, Social Security does not pay a negative COLA. Rather, no COLA is paid until the CPI rises above its prior level.

## Social Security COLAs and the Experience of 2008

Benefit changes for individuals born in 1947 derive from interactions between Social Security's provisions for granting COLAs and unusual economic conditions in 2008. As Figure 1 shows, the CPI increased significantly through mid-2008, driven by rising energy prices. This price increase caused a 5.8percent COLA to be announced in the fall of 2008, the largest since 1982.<sup>10</sup> No sooner had the COLA been set, however, prices declined rapidly.<sup>11</sup> Nevertheless, in accordance with the law, the 5.8-percent COLA payment took effect in January 2009.

Figure 1. Consumer Price Index for Urban Wage Earners and Clerical Workers, July 2007-September 2009



Notes: Dashed line signifies price level at time 2009 COLA was calculated. Index benchmark of 100 equals price levels in 1983.

Source: U.S. Bureau of Labor Statistics (2007-2009).

In effect, the 2009 Social Security COLA compensated current beneficiaries for an increase in prices that no longer existed. While the price level as of January 2009 was 0.26 percent lower than in January of 2008, nominal Social Security benefits were 5.8 percent higher. Thus, the buying power of Social Security benefits increased significantly.<sup>12</sup>

In response, Social Security will pay no COLA until the CPI exceeds its prior high, represented by the horizontal line in Figure 1. In effect, inflation is allowed to whittle away the purchasing power of Social Security benefits until the price index returns to the previous high. The Social Security Administration announced in October 2009 that no COLA would be paid in January of 2010.<sup>13</sup> No COLA is expected in 2011 either, followed by a 1.4-percent COLA in 2012 if prices rise as projected.

While current beneficiaries have received increased real benefits due to the price fluctuations of 2008, individuals born in 1947 – who turned 62 in 2009 – may receive *lower* benefits. Sixty-two is the first age at which Social Security retirement benefits can be claimed, which means that individuals born in 1947 were subject to inflation in 2008 but did not receive the 5.8-percent "windfall COLA" paid in January 2009.<sup>14</sup>

As noted above, the AIME indexes earnings only through age 60 and is unadjusted for inflation thereafter. From mid-2007, when AIMEs for the 1947 cohort were calculated, through the third quarter of 2008, when benefits for this cohort would first become subject to COLAs, the CPI-W rose by 5.8 percent. As some experts have noted, a spike in inflation during the short period between the final year the AIME is wage-indexed and age 62 can permanently reduce the purchasing power of subsequent retirement benefits.<sup>15</sup> The price increase affecting the 1947 cohort was the largest for any cohort since 1982.<sup>16</sup> Moreover, even if inflation for consumer goods at age 61 translated directly to higher nominal wages which is unlikely<sup>17</sup> - average *indexed* earnings would increase by only a trivial amount, as the period with the spike in inflation would affect only one year out of 35 years in the AIME calculation.<sup>18</sup>

The Social Security formula has no mechanism that would reliably produce an increase in initial benefits sufficient to compensate for the loss of purchasing power due to foregone COLAs in 2010 and 2011. Affected individuals cannot escape benefit reductions by delaying benefit claiming until after COLAs resume in 2012. While the PIA is the basic benefit payable as of the Full Retirement Age, it is actually first calculated as of age 62 and then inflation-adjusted to the Full Retirement Age using the applicable COLAs for those years. It is then adjusted to compensate individuals for claiming benefits after or before the Full Retirement Age. For that reason, a 62-year-old in 2009 will be subject to the zero COLAs for 2011 and 2012, even if he has not yet claimed benefits. His benefits, whenever claimed, will have declined in real terms due to inflation during 2010-11.

### Replacement Rates by Cohort

It is tempting to analyze the treatment of the 1947 birth cohort simply by comparing the dollar value of benefits to those received by other birth cohorts. However, a noted Social Security expert points out: "What is significant, for proper analysis, are the *relative* levels, because both the value of the dollar and the general wage levels have changed so drastically over the years."<sup>19</sup> For this reason, we use replacement rates to compare the treatment by Social Security of different birth cohorts.<sup>20</sup> This analysis uses Social Security's definition of replacement rates, in which benefits are represented by the PIA and pre-retirement earnings are represented by AIME.<sup>21</sup>

Figure 2 shows replacement rates for the birth cohorts of 1930 through 1948.<sup>22</sup> There is clearly variation from year to year; the mean replacement rate – excluding 1947 and 1948 – is 43.5 percent. The 42.4-percent replacement rate for the 1947 cohort is the lowest of the whole group. It is 2.6 percent below the average rate, 3.4 percent lower than the 1946 cohort, and a full 7.6 percent below the 1948 cohort.<sup>23</sup>



Figure 2. Ratio of Primary Insurance Amount to Average Indexed Monthly Earnings, by Birth Cohort

For a typical retired couple with a monthly benefit of \$2,374, a 2.6-percent benefit reduction would cost around \$749 per year throughout their retirement.<sup>24</sup> If they survive to a typical age of 83, this couple will lose nearly \$12,729 in lifetime benefits. While highincome households may shrug off such a cut in their Social Security benefits, for low earners, every penny counts.

### **Potential Solutions**

A short-term solution to the new Social Security notch is an ad hoc benefit increase for individuals in the 1947 birth cohort. To make benefits comparable to the 1946 cohort would involve an increase of around 3.5 percent. Perhaps a better option is a more modest 2.7-percent increase, which would make the 1947 cohort's benefits comparable to those received by cohorts from 1930-1946.

However, a permanent solution is also desirable. Given the complexity of the benefit formula, it may not be possible to prevent any such notches from occurring in the future, but steps to minimize benefit discontinuities make sense. The goal should be to reduce the possibility that small numbers of beneficiaries are subject to seemingly arbitrary benefit changes.

One option would be to index earnings to wages through age 62 rather than age 60. This would increase benefits overall – which, in the absence of other changes, would raise the long-term Social Security deficit but reduce the potential for a repeat of the 2008 experience, so long as we assume that prices and nominal wages rise and fall together. As noted above, however, this is often not the case. In addition, data on wage growth are available only with a lag, complicating the calculation of benefits.<sup>25</sup>

Another option would apply COLAs to the AIME from age 60 to age 62, at which time the PIA is calculated.<sup>26</sup> This idea would have prevented benefit reductions for the 1947 cohort by granting them the 5.8-percent 2009 COLA, which would compensate for receiving no COLAs in 2010 and 2011.

### Conclusion

While a congressional ad hoc COLA for current beneficiaries is not justified, given that the real purchasing power of today's benefits has increased, an argument can be made that individuals age 62 in 2009 deserve some adjustment. Their reduced benefits stem from an unintended quirk in the Social Security benefit formula. While Social Security benefits may need to be reduced as part of any reform, unintended cuts focused on a small group of near-retirees, rich and poor alike, make no sense. Unlike the previous notch, Congress will now have a politically popular and economically sensible option upon which to act.

#### Endnotes

I The Social Security notch derived from an error in Congress's attempts to adjust benefits for the effects of inflation and its subsequent efforts to address that error. In response to rising prices, in 1972 Congress altered the benefit formula to automatically account for inflation. Previously, the system had accounted for inflation with ad hoc COLAs that required new legislation. Unfortunately, the 1972 Social Security amendments introduced an error into the formula that generated rapidly rising benefits, such that the program would soon be rendered insolvent. To address this problem, the 1977 Social Security amendments instituted a new benefit formula, which remains more or less intact to this day. However, the transition from the older, flawed formula to the current one was not seamless. Excessive benefits under the old formula were reduced, while the new formula allowed benefits to increase along with wages. Individuals born from 1917 through 1921 were at the junction of these policies, such that cohorts born both before and after them often received higher benefits in dollar terms.

2 See Kollmann (2003). For a plain-English discussion of the notch issue, see AARP (2009).

3 Author's calculations from the Thomas Congressional Database (2009). While legislative action on behalf of the notch cohorts is unlikely today, these bills have not gone away. The Notch Baby Fairness Act and the Notch Baby Health Care Relief Act have both been introduced in the last seven Congresses.

4 Congress has investigated mailing scams directed at seniors on this issue. See U.S. House of Representative, Ways and Means Subcommittee on Social Security (2001). The largest seniors group, AARP, was not accused of taking part in such solicitations and has not endorsed legislation to compensate the notch cohorts.

5  $W_{it} = W_t/A_t * A_{60}$ , the indexed wage for year  $t(W_{it})$ , is equal to the nominal wage at year  $t(W_t)$  divided by the average wage at time  $t(A_t)$  multiplied by the average wage as of age 60, which is the age of indexation in the Social Security benefit formula.

6 Indexing is based upon SSA's National Average Wage Index Series, see U.S. Social Security Administration (2009b).

7 The reason for the lack of indexing after age 60 is

that payroll data are available to SSA only with a 6- to 18-month delay.

8 As the Congressional Research Service (2005) notes: "Under current law, Social Security benefits increase from one generation to the next at the rate that the national average wage rises. ... Because Social Security benefits are wage-indexed, the purchasing power of benefits rises from one generation of workers to the next, and the replacement rate – initial benefits as a percentage of workers' career-average earnings – remains constant for each successive generation of workers."

9 The third-quarter CPI is calculated by averaging the CPI levels for July, August, and September.

10 For historical COLA figures, see U.S. Social Security Administration (2009c).

11 The price of gasoline as of January 1, 2009, for instance, was barely half that of one year earlier.

12 In addition, most retirees are exempt from increases in Medicare Part B in years in which a COLA is not paid. Both political parties and President Obama have also supported paying a \$250 ad hoc COLA to current beneficiaries. For more details on the treatment of current beneficiaries, see Biggs (2009).

13 See U.S. Social Security Administration (2009a).

14 In addition, individuals claiming disability insurance in 2009 would have their benefits affected similarly to individuals born in 1947.

15 Diamond and Orszag (2005).

16 The increase in prices during the preceding period, affecting the 1946 birth cohort, was a more modest 2.2 percent and in the subsequent period, which will affect the 1948 birth cohort, was negative 2.5 percent. In the period since inflation was tamed in 1983, the typical increase in prices during the period between AIMEs being calculated and PIAs being subject to COLAs was 3.4 percent.

17 From the third quarter of 2007 through the third

quarter of 2008, for instance, the Employment Cost Index for wages and salaries rose only 3.1 percent, versus 5.8 percent for the CPI-W. Quarterly changes in the CPI-W and the Employment Cost Index for civilian wages and salaries from 2001 to the present have a correlation coefficient of only 0.14.

18 For instance, a 5-percent increase in average wage growth as of age 61 would increase Average Indexed Monthly Earnings by only around 0.12 percent. If rising prices translate directly to wages, benefits might increase somewhat, as Social Security's "bend points" increase annually with average wage growth. An increase in the bend-point dollar amounts implies that a larger share of earnings fall in the 90-percent replacement range and smaller proportions in the 32- and 15-percent replacement rates. The precise increase depends upon the earnings level of the individual. Very low earners, whose earnings fell entirely in the 90-percent replacement range, would see no benefit increase.

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19 Myers (1993), emphasis added.

20 Replacement rates can be defined in a number of different ways. For example, see Springstead and Biggs (2008).

21 For the replacement rates used in this analysis,

the AIME is indexed to changes in the CPI-W from the time of calculation – here assumed to be midyear as of age 60 – to the third quarter of age 61, the time at which future benefits become subject to COLAs. The PIA is calculated as of age 62. For purposes of comparability, replacement rates do not account for increases in the Full Retirement Age or for increases in longevity.

The basic ratio of AIMEs at the time of calculation to PIAs is the same for all cohorts, at around 44.8 percent. Differences arise based on the rate of inflation between the time the AIME is calculated – here assumed to be July of the year the cohort turned 60 – and the third quarter of the year the individual turns 61, when COLAs first become applicable to benefits.

22 The number of cohorts simulated is limited by the National Average Wage Index Series, which begins in 1951.

23 The 1948 birth cohort receives the highest replacement rate of any cohort simulated due to the 2.5-percent decline in the CPI-W from the time their AIMEs are calculated to when their benefits first become subject to annual COLAs.

24 The estimated benefits are for a couple consisting of a low-wage and a medium-wage earner retiring at age 66 in 2013 and receiving a combined annual benefit of \$28,488 in constant 2009 dollars. See U.S. Social Security Administration (2009d).

25 For instance, the Social Security Trustees Report, which is published in March, generally contains only tentative data on wage growth in the prior year.

26 Proposed by Diamond and Orszag (2005).

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