GAO

Report to the Chairman, Subcommittee on Social Security, Committee on Ways and Means, House of Representatives

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SOCIAL SECURITY

The Notch Issue

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Comptroller General
of the United States

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The Honorable Andy Jacobs, Jr.
Chairman, Subcommittee on Social Security
Committee on Ways and Means
House of Representatives

Dear Mr. Chairman:

This report responds to the request of your predecessor, the Honorable James R. Jones, for a review of a disparity in benefits, known as the notch, between cohorts of social security recipients that resulted from the Social Security Amendments of 1977. Specifically the report discusses how the notch arose, its effects on beneficiaries, the financial implications of some proposed notch legislation, and the socioeconomic characteristics of affected social security recipients.

We are sending copies of the report to the Secretary of the Department of Health and Human Services and to cognizant congressional committees. Copies will be made available to others who request them.

Sincerely yours,

Charles A. Bowsher

Charles A. Bowsher
Comptroller General
of the United States

Executive Summary

Purpose

Social security retirees born just before 1917 generally receive higher benefits than those born in 1917 and after—a disparity commonly referred to as the notch. Pre-1917 birth retirees were compensated at an unexpectedly high level because of the way increased inflation affected the benefit formula. This resulted from the introduction of an automatic cost-of-living adjustment in the 1972 Amendments to the Social Security Act.

Continued use of this benefit formula would have jeopardized the solvency of the Social Security Trust Funds and required large future increases in payroll taxes to pay for the growing benefits. Faced with this problem, in 1977 the Congress corrected the formula, in effect reducing benefits for retirees born after 1916. For nearly a decade, these retirees have voiced their concerns to the Congress that they have been treated unfairly.

Because of the continuing controversy, the Chairman of the Subcommittee on Social Security, House Committee on Ways and Means asked GAO to study the issue. Specifically, the Chairman asked GAO to review

- how the notch arose,
- how beneficiaries are affected,
- alternatives for financing legislation to address the issue, and
- socioeconomic characteristics of those affected.

Background

Before 1972, the Congress adjusted social security benefits on an ad hoc basis. The 1972 Amendments to the Social Security Act changed the benefit formula to provide automatic adjustment for cost-of-living changes. But the method of adjusting benefits, combined with prices rising faster than wages, caused future retirees' benefits to be overindexed—increased by more than the rate of inflation.

A consensus developed to revise the benefit formula. After considerable debate, the Congress passed the 1977 Amendments to the Social Security Act. The new formula was designed to eliminate overindexing and stabilize replacement rates (the portion of an individual's preretirement earnings the retirement benefit replaces).

New benefit rules were instituted for individuals attaining benefit eligibility (age 62) on or after January 1, 1979. As the new rules could result in lower benefit levels, a transitional payment strategy was developed for retirees born between 1917 and 1921. Benefits for these retirees

were computed using both the transitional formula and the new rules, and they received the higher benefit. Those born after 1921 received benefits computed using only the new rules. These transitional retirees, born in 1917-1921, have become known as the notch group.

Results in Brief

The 1977 Amendments, in altering the formula that had benefited some social security recipients born before 1917, stabilized replacement rates and lowered their level. But in the process, many retirees born in 1917 and thereafter received smaller benefit amounts than those born just before them. The rapid inflation of the late 1970s and early 1980s increased the size of the benefit differences between these groups.

Among those retiring at age 62, differences in benefit amounts were generally small. But these differences were larger for those who retired after age 62.

While the replacement rate for notch retirees is generally lower than that for individuals born immediately before them, it is generally higher than the replacement rate for succeeding groups of retirees.

Legislative proposals to lessen the benefit disparities are costly and could be difficult administratively. Solutions that would draw money from the trust fund to increase benefits to the notch group could jeopardize the short-run financial condition of the system and its ability to finance the coming retirement of the "Baby Boom" generation. Other options would require reducing the growth of benefits to those already retired, which the Congress chose not to do in 1977. While GAO does not support any specific notch legislation, it offers guidelines for any further congressional consideration of the issue.

GAO's Analysis

Lowering of Replacement Rates Intended

Benefit disparities resulted mainly from the new rules. As anticipated, these rules lowered replacement rates by from 5 to 10 percent and separated old-formula from new-formula retirees by birthdate.

Higher Inflation Contributed to Disparities

Inflation in the late 1970s and early 1980s was higher than had been anticipated, causing the benefits of those under the old formula to increase more rapidly than was expected. This reduced the effectiveness of the transition formula, which was designed to cushion the adjustment to the new law. In turn, this increased the benefit differences between the notch group and those born immediately before them. The differences are greater for beneficiaries with higher lifetime covered earning and later retirement ages.

While overall replacement rates were lowered by the 1977 law, the rates received by notch retirees were generally higher than had been expected when the law was passed. Also, the replacement rates of those attaining eligibility age (62) just before and during the transition generally were higher than the rates of many retirees historically and of those retiring after the transition. Thus, a person born in 1917, the first year of the notch group, and retiring at age 65 received a lower percentage of preretirement earnings than a person born in 1916. But the replacement rate for this retiree is higher, for example, than for one born in 1922, the first year after the transition period (see fig. 1).

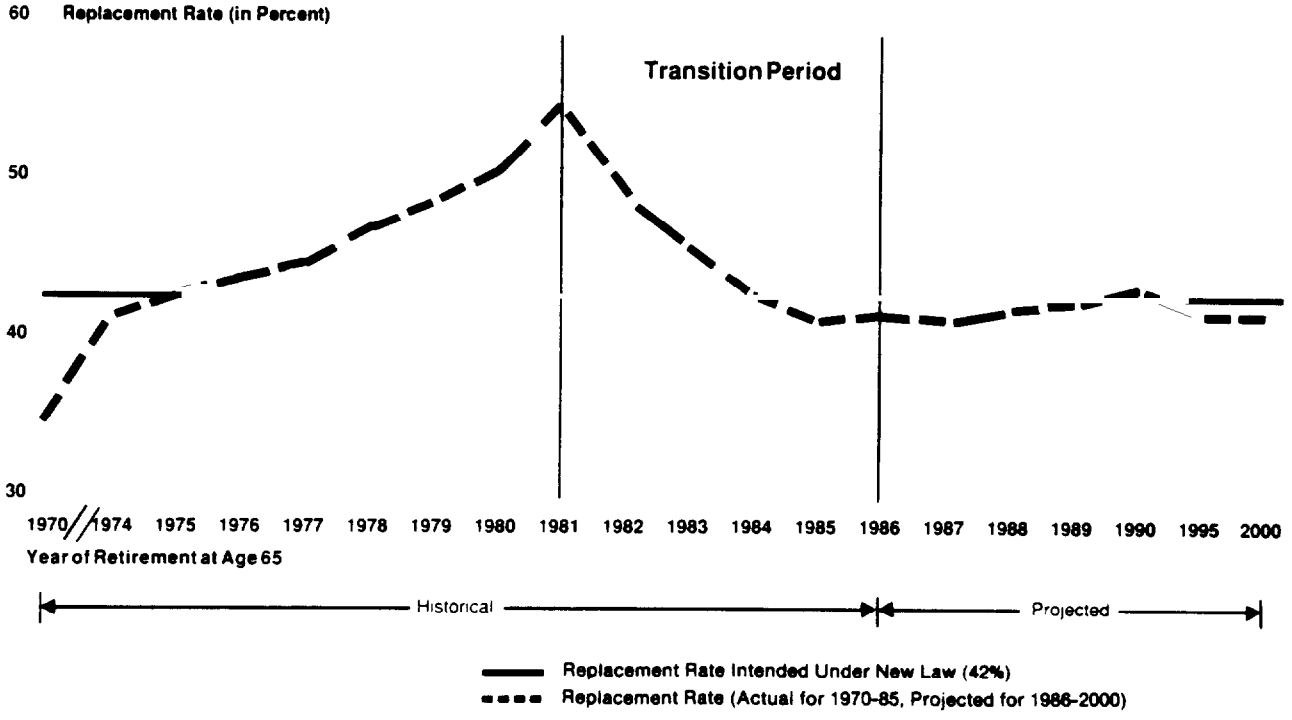
Proposals to Diminish Notch Costly and Risks Remain

Legislative proposals to diminish the notch disparity have been introduced, but their cost is a major point of debate. Additional payments to beneficiaries through 1996 could range from about $20 billion to over $300 billion. Using current trust fund balances to finance notch remedies would slow the attainment of minimum contingency reserve levels and could put the system at additional risk should there be an economic downturn. Also, the Social Security Administration, in light of continued efforts to cut its costs and staffing levels, believes implementation of notch remedies might be difficult.

Past Congressional Actions Affect Financing Options

Other options for financing notch remedies from the trust fund would involve either increasing revenue (through payroll taxation) or reducing other expenditures, such as slowing the growth of benefits for those under the old law. The Congress has considered these options in the past and rejected them. Under 1983 legislation, current workers (who would be taxed to pay higher benefits to notch beneficiaries) already pay higher taxes than would be necessary under the pay-as-you-go concept to partially fund their own future benefits and reduce future workers' tax burden. Imposing additional taxes on these current workers to finance a higher replacement rate for the notch group (many of which already receive a higher replacement rate than can be anticipated by

Figure 1: Replacement Rates for an Average Earner Retiring at Age 65, 1970-2000



current workers) would raise significant issues of equity. As another alternative, it has been proposed that benefits to the pretransition group be reduced or their growth slowed to permit increased benefits for notch retirees. Such proposals however, would require the Congress to reassess its decision in the 1977 Amendments not to affect the benefits for those who attained eligibility for benefits before the new law was implemented in 1979.

Other Factors to Be Considered

In deciding whether to compensate notch beneficiaries, factors other than benefit disparities also should be considered. Because of social security cost-of-living increases that outpaced wage increases, many retirees generally benefited relative to nonretired groups from the inflation of the late 1970s and early 1980s. Also, in comparing the notch disparity with patterns of income, assets, and health status, retirees likely to experience larger disparities have, on average, higher incomes and more assets. Those who tend to be in poorer health are more likely to experience smaller benefit disparities.

Matters for Congressional Consideration

GAO suggests that the Congress, in deciding whether or not to pursue a legislative solution for the notch issue, consider

- keeping the effect of notch legislation on the current and projected trust fund balances as neutral as possible,
- evaluating the resources and time required for implementing the legislation, and
- retaining the current transition period.

Agency Comments

Overall, the Department of Health and Human Services agreed with GAO's findings. The Department said, however, that more emphasis should have been placed on the overcompensation of retirees born just prior to 1917. GAO believes that the issue is sufficiently discussed. (See app. VIII.)

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Abbreviations

AARP	American Association for Retired Persons
AEI	American Enterprise Institute
AIME	average indexed monthly earnings
AMW	average monthly wage
COLA	Cost-of-living adjustment
CPI	consumer price index
CPS	Current Population Survey
DI	Disability Insurance
HHS	Department of Health and Human Services
MBA	monthly benefit amount
NBS	New Beneficiary Survey (compiled by SSA)
OASDI	Old Age, Survivors' and Disability Insurance
OASI	Old Age and Survivors' Insurance
PIA	primary insurance amount
SIPP	Survey of Income and Program Participation
SSA	Social Security Administration

Introduction

The social security "notch" is a term used to describe a disparity in benefit awards between individuals who share similar circumstances concerning the computation of their benefits except that their birth dates differ slightly. Following is an example, presented at a recent Congressional hearing,[1] of the disparity.

"Two sisters, Edith and Audrey, started work at the same book bindery in southern California on the same day in October 1957. Audrey was slightly older, having been born in March 1916, than Edith who was born in June 1917. The two worked together at similar pay for twenty five years and in the summer of 1982, with Edith turning 65, both went to the Social Security office to claim their benefits. They were told that since the older Audrey had worked about eighteen months after her 65th birthday, there would be a slight difference in the benefit each received. The total lifetime earnings of the pair was almost identical differing only by about four per cent (in favor of the younger Edith). To their surprise, when they received notification of their benefit award, the difference was not slight. Instead, Edith (born in 1917) received a $512.60 monthly award or $111.80 per month less than Audrey (born in 1916) who received a higher benefit of $624.40 per month. The difference was almost eighteen percent!"

Examples such as this characterize discussions of the notch and underlie concern about the fairness of our nation's social insurance program.

The Notch: A Complicated Technical Issue

The clarity of examples that illustrate the notch contrast rather sharply with the complexity of factors underlying the problem. The history and development of the issue are rooted in changes enacted by the Congress over the years in the way social security benefits are calculated. In particular, the 1972 and 1977 Amendments to the Social Security Act are relevant. In each instance, the design of the benefit formula changes interacted with unanticipated economic conditions to affect benefits in a way different than what was expected.

The 1972 Amendments instituted automatic benefit indexing for changes in prices—"cost-of-living adjustments" (COLAs). While this was considered a desirable development, the changes also created the potential that periods of rapid inflation (during which prices increased more

[1]Hearing on the social security notch before the House Select Committee on Aging, May 15, 1986. GAO did not examine lifetime earnings or benefit data related to this example.

rapidly than wages) such as that of the 1970s would increase significantly the initial benefits of persons retiring subsequently. Efforts to correct this situation led to enactment of the 1977 Amendments, which again revised the benefit formula. The 1977 revision of the benefit formula was considered to be consistent with a more stable, predictable long-run financing situation for the social security system. But making a transition to the new benefit rules presented some complications. The new law covered those attaining age 62 in January 1979 and later. Transition rules were adopted for those attaining 62 in 1979 through 1983 (i.e., those born in 1917 through 1921). These transition rules were expected to smooth the transition from the old (pre-1977) to the new (post-1977) formula, gradually reducing the levels of unanticipated overcompensation for succeeding retirees. For individuals turning 62 after 1983, the new rules were fully applicable. Those turning 62 before 1979 were permitted to continue to use the generally more generous pre-1977 formula computation.

After implementation of the 1977 changes, it was discovered that some individuals in the transition group were likely, after a few more years of work, to receive considerably lower benefit amounts than those receiving benefits based on the old formula. This was true even when the earnings' history and other characteristics of the individuals were nearly identical. The notch, then, refers to the disparity in benefits for individuals comparable in characteristics but born in closely adjacent years, which determine the applicability of different benefit formulas. As the effects of the new law and transition provisions became apparent, debate ensued over whether further changes to the benefit formula should be made and, if so, what form they should take.

Notch May Affect Millions of Beneficiaries

It has been claimed that the notch affects upwards of 10 million beneficiaries who come under the transition rules, the number depending on how it is defined. There is some disagreement about definition.[2] Moreover, the effect may vary among individual recipients. For some, benefit differences can be well over $100 per month. On the other hand, some individuals who believe their benefits are lower may in fact not be affected at all or even may have received higher benefits relative to other recipients.

[2]Social Security Administration (SSA) data indicate that as of December 1986 the number of retired worker beneficiaries on the rolls (in current payment status) born during the period 1917-1921 totaled 6.6 million.

Legislation designed to reduce the disparities between pre- and post-1979 retirees may affect millions of workers who contribute to social security under its current cost-financing (pay-as-you-go) concept. Concerns about cost have characterized the social security program for the past decade in particular and were a major consideration in the enactment of reforms in the 1977 Amendments and in 1983 legislation. In 1977, the revision of the benefit formula could not be separated from concerns about the financial status of the system. Likewise, legislation to address the notch issue cannot be considered apart from concerns about cost as well as who pays and who benefits.

Policy Controversy, Practical Constraints

During the past several years, there has been continuing interest in the notch issue. Thousands of benefit recipients have lobbied the Congress to address the issue. Many in the Congress have responded by introducing or cosponsoring legislation to change the computation of benefits or to study the issue further. Interest groups for the elderly have taken different sides. The National Committee to Preserve Social Security and Medicare has made correcting the notch a major initiative. The American Association for Retired Persons (AARP) recently took a position against enactment of notch legislation that would require additional financing. Many retirees who depend on social security for a large share of their income are concerned about this issue, one important to the future of social security and the public's perception of the system's fairness. At the same time, any "solution" must deal with some significant problems of an administrative nature that generate other issues and difficulties in implementing legislation.

Objectives, Scope, and Methodology

The notch issue was debated during the 99th Congress. Subsequently, the Chairman of the Subcommittee on Social Security, House Committee on Ways and Means, asked us to conduct a comprehensive study of the issue.[3] James R. Jones, then Chairman, asked us to review

- how the notch arose
- what beneficiaries are affected by it, and
- what alternatives exist for financing legislation to address the issue

During our review, we surveyed literature on the notch issue as well as the relevant history of changes to the social security benefit formula dating back to the 1972 Amendments. We consulted with SSA officials

[3]See app. I for request letter.

and others knowledgeable about the issue. Most of the data are from the Social Security Administration. Among other materials used were analyses by Robert J. Myers, former SSA Chief Actuary, and the American Enterprise Institute. We concentrated on the technical and policy aspects of the issue but did not study how or whether notch legislation could be effectively implemented. We began our work in the summer of 1986 and completed the major portion of it in the fall of 1987.

In addition, the subcommittee requested information on the socioeconomic characteristics of those affected by the notch. Of particular concern was the economic and health status of those most likely to benefit from notch legislation. We utilized data from SSA's New Beneficiary Survey (NBS) to assess the characteristics of those affected by the notch. For further detail on our methodology and data, see chapter 7 and appendix II.

The Social Security Benefit Formula Before the 1977 Amendments to the Social Security Act

To analyze the development, causes, and effects of the notch benefit disparity requires a review of the history of changes to the social security benefit formula. The notch arose out of the changes instituted in the 1977 Amendments to the Social Security Act to correct unanticipated effects of the 1972 Amendments. The 1972 Amendments first instituted the practice of automatic benefit indexing (i.e., cost-of-living adjustments or COLAs). The 1972 changes, in the context of inflationary conditions in the 1970s, led to the recognition that the benefit formula contained a flaw that could overcompensate future retirees and, if left unchanged, eventually threaten the financial stability of the social security system.[1]

Overview of the Social Security Benefit Formula

The overall structure of social security[2] benefits encompasses many detailed elements and different conditions. For example, Old-Age, Survivors' and Disability Insurance (OASDI) covers individual retirees, but also provides benefits for their spouses, dependents, and survivors, as well as for disabled persons. Benefits for these latter groups may be affected by the legislated changes from which the notch issue arose, but we focused on the computation of benefits for individual retirees based on their own earnings' record.

The basic element in computing individual social security benefits (including those of dependents and survivors) is the "primary insurance amount" (PIA). Computation of the PIA involves two basic steps:

1. Calculation of the benefit base. This is derived from the reported taxable earnings of the worker in social security-covered employment over

[1]For a more detailed description of the calculation of social security benefits, see various SSA publications, including Social Security Bulletin, Annual Statistical Supplement, 1986. Also see Robert J. Myers, Social Security, Richard D. Irwin, Inc., 1985. Furthermore, much of the discussion in this chapter is based on information from numerous documents and studies. Among the most useful in discussing the problems in the benefit formula are: Colin D. Campbell, Overindexed Benefits: The Decoupling Proposal for Social Security, American Enterprise Institute, 1974; Robert S. Kaplan, Indexing Social Security: An Analysis of the Issues, American Enterprise Institute, 1977; and Lawrence H. Thompson. "Toward the Rational Adjustment of Social Security Benefit Levels," Policy Analysis, Vol.3, No.4, Fall 1977, pp. 485-508. These studies provide discussion of many detailed technical points that cannot be fully developed here.

[2]The term "social security" is a broad one encompassing not only OASDI but Medicare (both Hospital Insurance and Supplementary Medical Insurance) and other elements of our social welfare system. Generally, reference to "social security" in this report will be to Old-Age and Survivors' Insurance (OASI), and to Disability Insurance (DI) where noted.

a specified period of the worker's employment history.[3] From this may be excluded a number of years of low earnings. The covered taxable earnings then are summed and averaged to provide a measure of the average monthly earnings. The benefit base provides a measure of the level of earnings attained by a worker over his/her lifetime for purposes of benefit computation.

2. Application of the benefit formula to the benefit base to compute the PIA or benefit amount. This formula represents the percentages of the benefit base within given brackets that can be awarded as benefits. The endpoints of the brackets in the benefit formula usually are referred to as "bendpoints," and a given percentage will apply to the amounts within the brackets. In its simplest terms, the PIA is calculated as follows: benefit base x benefit formula = primary insurance amount. A hypothetical example would be:

Avg. monthly earnings	= $400
90% of first $100 of avg. earnings	= $ 90
30% of earnings between $100 and $300	= 60
15% of earnings over $300	= 15
Primary insurance amount	= $165

In this example, the worker's average monthly earnings during his/her years of work under social security is $400. Applying the benefit formula to this amount, the worker receives 90 percent of the first $100 of average earnings, 30 percent of the next $200 (the amount between $100 and $300), and 15 percent of the amount over $300, for a total PIA (or benefit amount) of $165.

The Benefit Formula Before the 1972 Amendments

Before the 1972 Amendments, social security benefit formulas were not automatically adjusted for inflation. Instead, the Congress from time to time passed legislation raising benefit levels. Such ad hoc benefit increases could be considered in part as adjustments for inflation and in part as real increases in benefit levels. The benefit base then was called the average monthly wage (AMW). The benefit formula was applied to the AMW to obtain the individual PIA amount. For example, in 1969 the

[3]The individual's covered taxable earnings, not payroll taxes, are reported by way of the income tax system to the Internal Revenue Service, and to SSA. Payroll taxes paid by individuals are not per se reported and a record of the individual taxes paid into the system is not actually maintained. Thus, a common perception that individual tax contributions are held in a "social security account" is not accurate. Also, note that "taxable earnings" are the annual earnings subject to payroll tax. The current maximum taxable ceiling is $45,000. Earnings over this amount are not taxed for social security nor included in the computation of the benefit base.

formula underlying the benefit table in the law (applicable for January 1970) was as follows:

81.83% of the first $110 of AMW
29.76% of AMW between $111 and $400
27.81% of AMW between $401 and $550
32.69% of AMW between $551 and $650

For example, an AMW of $400 yielded a PIA of $176.31 (or $90.01 + $86.30).

The AMW was based on a worker's covered taxable earnings over his/her working life. Generally, this consisted of any earnings after 1950 summed and divided by the number of "computation" or averaging years (in months) of earnings, excluding several years of lowest earnings. The earnings used in the benefit base computation were unindexed.[4]

The benefit formula reflected the percentages of the AMW between certain bendpoints that were to be included in determining the PIA. Several things about this formula are important. First, the percentages of AMW included as part of the PIA tended to decrease for higher levels of AMW. This means that the formula "replaces" a relatively higher proportion of a lower earner's total AMW and a relatively lower proportion of a higher earner's total AMW. This was true even though individuals receive higher total benefits the higher their lifetime earnings and AMW. This characteristic, referred to as "progressivity" in the benefit structure, means that social security possesses a redistributive character. Second, the degree to which social security "replaces" a worker's earnings was largely determined by the percentages of the benefit formula. The replacement ratio or rate—the relationship of the PIA (or benefit) to a measure of the worker's preretirement earnings is a crucial concept in analyzing the

[4]The number of averaging years formerly differed for men and for women but these differences later were eliminated. Also, the number of averaging years included in the formula was lengthening during this time. In addition, there was another computation method for benefits, the "old start" method, which permitted earnings before 1951 to be included in the computation of benefits. This method could be used for some individuals if it was appropriate and resulted in a higher benefit award.

benefit structure and its equity. It is also a concept that we used extensively in analyzing the notch issue. The use and limitations of the replacement rate are discussed in more detail in appendix III.[5]

Finally, during the earlier period of ad hoc adjustments, whenever the Congress legislated a benefit increase the benefit formula was adjusted to reflect the increase. The percentage increase passed by the Congress was applied to the benefit formula percentages for each bendpoint.[6] For example, when a legislated 10-percent benefit increase was set for 1971, the previous benefit percentages (applicable for 1970) were increased by 10 percent as shown below:

90.01% of the first $110 of AMW
32.73% of AMW between $111 and $400
30.59% of AMW between $401 and $550
35.96%[7] of AMW between $551 and $650

Thus, for an AMW of $400, the January 1971 formula yields a PIA of $193.96 (or $99.01 + $94.95), 10 percent higher than the 1970 PIA shown above for a year earlier.

The Benefit Formula After the 1972 Amendments

Problems arose with the institution of the automatic cost-of-living adjustments introduced in the 1972 Amendments and higher rates of inflation, in which prices increased as rapidly (or even more rapidly) than wages. The late 1960s and early 1970s were characterized by higher rates of inflation than had been experienced for some time in the U.S. economy. The view became prevalent that the social security program could be improved through automatic adjustment of benefits for price change (i.e., indexing) to maintain the purchasing power of recipients' benefits. Often, the ad hoc adjustments were viewed as not timely

[5]Much of the discussion and analysis in this report will relate to hypothetical, but representative, steady earnings' histories. In the analysis of social security benefit levels, it is common to use low, average, and high earnings' histories, assuming that a representative individual earned at the same relative level throughout his/her lifetime. Therefore, our discussion of benefits and replacement rates generally will center around three typical earning cases: (1) low earnings - earnings at minimum wage throughout a career, (2) high earnings - earnings at the maximum taxable amount throughout a career, and (3) average earnings - earnings at the average wage of all workers covered by social security. These typical cases provide a fairly consistent means of comparing individuals and their benefits across years.

[6]In successive years, whenever the maximum taxable ceiling increased brackets were added to the table as necessary, thus raising the maximum allowable AMW and PIA.

[7]For January of 1971, another bracket for the next $100 of AMW was added at a benefit percentage of 20. Thus, the maximum AMW was to be higher also.

in keeping the real purchasing power of retirees' benefits constant as the price level rose. Also, there was some desire to insulate the social security program from the political process where, it was perceived, there were incentives to raise real benefit levels.

In 1972, Congress amended the Social Security Act to provide for two principal types of automatic adjustments:

1. Benefits were to be increased automatically with changes in the consumer price index (CPI) if the annual index rose by 3 percent or more.

2. The maximum taxable ceiling was to be automatically increased with increases in the average wage covered by social security.

The method applied to adjust the benefit formula under the new automatic adjustment provisions was the same as that used prior to the 1972 Amendments. That is, the automatic benefit percentage increase was applied to the percentages of AMW allowed in each bracket of the benefit formula. Also, as the maximum taxable ceiling increased, higher levels of wages were brought under the benefit formula. This increased the maximum benefit payable under social security.

These changes in the benefit formula meant that an individual's benefit level would rise with increases in prices (inflation) as well as with increases in average wage levels. This latter aspect already was an integral part of the benefit structure; for workers who earned less than the maximum taxable amount, their future benefit levels would rise as their earnings rose. For those earning above the taxable ceiling, future benefits would increase as higher earnings levels were brought under the rising taxable ceiling. This in itself did not constitute a problem. But when coupled with the way in which price changes affected the benefit formula, it created the potential for overindexing of benefits, depending on the relationship of future price and wage increases.[8]

[8]Under some sets of assumptions about future price and wage increases, underindexing of benefits could occur (i.e., replacement rates could decrease over the years).

Overindexing and Inflation's Effect on Wages and the Benefit Base

Overindexing arose from the structure of the (indexed) benefit formula in the context of an inflationary economic environment. As previously described, under the benefit formula instituted in the 1972 Amendments, whenever a cost-of-living increase was granted, the percentage factors in the PIA benefit formula were increased by the same percentage. This resulted in maintaining the real purchasing power of benefits for retirees on the benefit rolls. It had the same effect for future benefit recipients not yet retired. In this sense, the system was said to be "coupled"—price changes affected the benefit determination of current retirees as well as current workers. However, inflation had another effect on the potential benefit levels of those yet to retire, one that operated through the benefit base (AMW). This made future benefit levels and replacement rates very sensitive to the relationship between the rates of wage growth and change.

Inflation affects the benefit base as it affects the growth of nominal (current dollar) wages in the economy. Generally, nominal wages are viewed as depending on two major factors: the productivity of labor, generally associated with increases in the real wages or earnings of workers, and changes in the price level.

To maintain the real purchasing power of a given nominal wage when inflation occurs, wages must rise by the same percentage increase as the rate of price change (i.e., cost of living).[9] During a period of sustained inflation, regular adjustments for price changes will be consistent with rising nominal wage levels. Under the post-1972 benefit formula, higher nominal wage levels would tend to raise the level of the unindexed AMW for individuals, resulting in higher expected future benefit awards.[10]

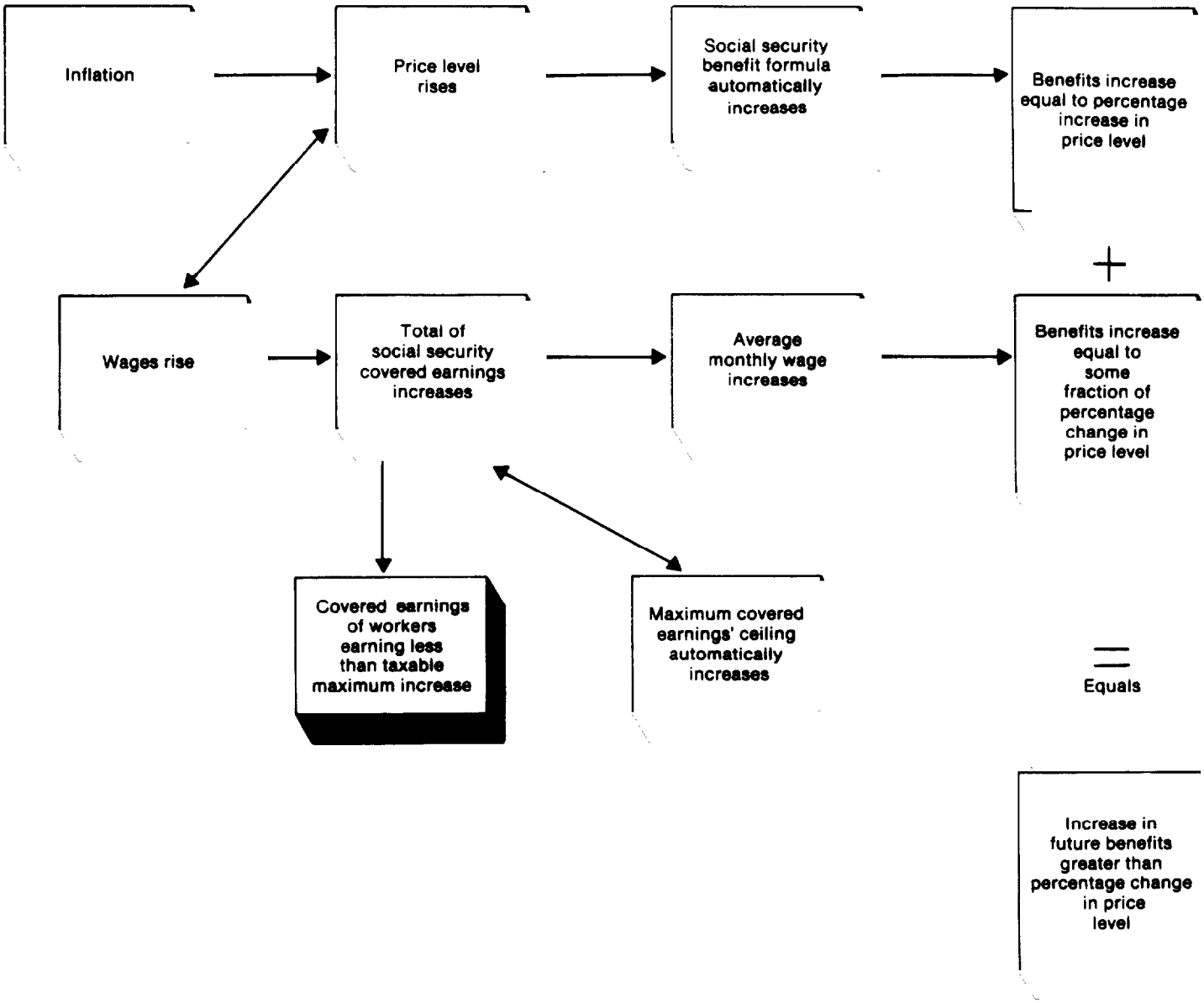
Inflation had a dual effect, resulting in higher future benefit levels for those yet to retire (as fig. 2.1 shows):

- It resulted in increases in the percentages of AMW awarded as benefits in the PIA computation.
- As it drove up nominal wage levels, it raised the computed AMW for future benefit recipients.

[9]While inflation usually results in higher nominal wages in the economy, such changes occur in an imperfect way. Actual nominal wage increases will not necessarily equal the rate of inflation over any given time period, and there will be variation in wages among occupations and industries.

[10]Also, rising wage levels result in a higher maximum taxable ceiling, which could mean higher benefit amounts for some individuals.

Fig. 2.1: Overindexing of Social Security Benefits Due to Inflation



Source: Based in part on diagram found in Colin D. Campbell, Overindexed Benefits: Decoupling Proposals for Social Security, American Enterprise Institute, 1974, p. 8.

In effect, those who had yet to retire were receiving dual compensation for the effects of inflation. Once a worker retired and the initial PIA was computed, the individual only received increases equal to the annual cost-of-living adjustment. It was the benefit levels of those still working and yet to retire that were considered to be "overindexed" because of the "coupled" nature of the benefit formula, which linked the method of computing benefits at the time of retirement to the method of increasing benefits after retirement.

Other Factors Affected Future Replacement Rates

Other factors complicated the effects of overindexing on future replacement rates or, more specifically, the ability to predict future replacement rates. Some of these factors tended to lower future replacement rates, thus mitigating some of the effects of overindexing.

In computing benefits, the number of years of earnings that an individual could include in the AMW computation was lengthening, eventually to reach 35 years for those attaining age 62 after 1990. Thus, succeeding retirees used an additional year for averaging in the computation of the AMW. During a period of rising nominal wages, the continual lengthening of the averaging period for successive cohorts slowed the growth in the AMW for any given earnings' history and tended to slow the growth in average replacement rates. While this mitigated the rise in benefits, the effect would largely have been diminished after the mid-1990s.

Another factor was a form of "bracket creep" due to the fixed wage brackets or bendpoints in the benefit formula. As an individual's wages rose, so did the AMW. In the progressive benefit formula, higher AMW amounts received a lower benefit percentage. Thus, replacement rates tended to fall as wages rose. This effect occurred even though the maximum taxable ceiling was adjusted automatically.

Another important characteristic of the benefit computation system in effect prior to the 1977 Amendments involved the effect of work in and after the year of attaining age 62 on retirement benefit levels. During periods of rapid inflation and rising nominal wages, the unindexed nature of the AMW meant that higher earnings near retirement could have a disproportionate effect on the AMW. This occurred because additional years of work after age 61 meant that a current year's earnings

replaced a much earlier year's earnings, which were at substantially lower levels, in computing the AMW.[11]

Combined, these factors made future replacement rates very sensitive to the rate of real wage growth and to particular combinations of price change and nominal wage growth projected to occur in the future.

Overindexing Affected the System's Future Solvency

With the inflation of the 1970s, the problem with the automatically indexed benefit formula came to be of great concern. A significant future problem was developing. For a given rate of real wage growth but higher rates of inflation, projections showed that the formula could lead to ever-increasing initial replacement rates. Some projections showed that, under projected annual rates of increases in prices of 4 percent and wages of 5.75 percent, replacement rates for some newly retired workers eventually would exceed 100 percent. That is, their initial monthly benefits could be greater than monthly earnings prior to retirement (see fig. 2.2). This was far above levels ever anticipated. Moreover, the adjustment procedure made future replacement rates very sensitive to the rates of price and wage change prior to a worker's retirement. Instability was introduced into both the determination of replacement rates and the future cost of the social security system.[12]

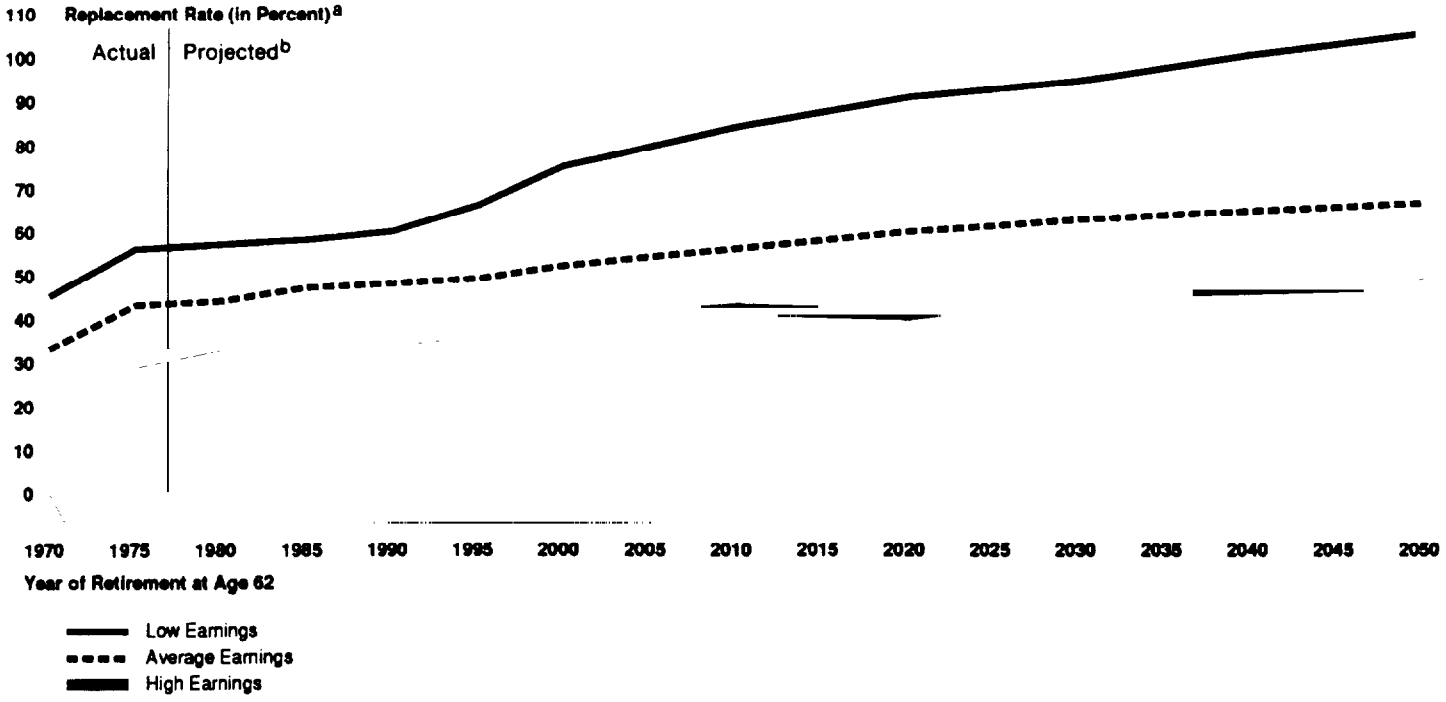
This effect on replacement rates created problems for the financing of the system by exacerbating already developing long-run financial difficulties resulting from changing demographic conditions. For example, it was projected that the increased expenditures from the trust funds as a percentage of taxable payroll would have to be matched by future payroll tax rates that, in some cases, might exceed 20 percent.[13] This generated concern about whether such rates would be viable and whether the system could maintain the support of taxpayers.

[11]Under the pre-1977 law, the number of years over which an individual's earnings were averaged equaled the number of years after 1955 and up to the year of attaining age 61. Thus if an individual worked past age 62, the earnings that year, if higher, could replace an earlier year in the computation of AMW. For example, the taxable maximum in 1975 was $14,100. This might replace earnings, in, say 1955, when the taxable maximum was $4,200.

[12]The interaction of price and wage change for a given rate of growth in real earnings was quite complicated in its effect on replacement rates. For further technical discussion see Lawrence Thompson, Policy Analysis, and Albert Rettig and Orlo R. Nichols, "Some Aspects of the Dynamic Projection of Benefits under the 1973 Social Security Amendments (P.L.93-233)," Actuarial Note No.87, Office of the Actuary, SSA, Apr. 1974.

[13]See Colin Campbell, Overindexed Benefits ..., and Robert S. Kaplan, Indexing Social Security ...

Figure 2.2: Projected Replacement Rates Under Pre-1977 Law for Age 62 Retirees by Earnings' Level



[a]Based on 100% of PIA.

[b]Based on 1977 Trustees' assumptions.

Source: House Report on H.R. 9346, 1977, p. 24.

The Decoupling Debate

The problem of overindexing became an important element in a broader debate on reform of the social security system that took place in the mid-1970s. An important outcome of this debate and highly technical discussion was the revision in 1977 of the benefit formula as well as other financing reforms. The term "decoupling" was applied to the objective of making the initial claim for benefits unrelated to the method of increasing benefits for changes in the price level for those already retired.

In attempting to change the benefit formula, the analysis of the pre-1977 benefit structure focused primarily on (1) the unindexed benefit base and (2) the adjustment of percentages in the benefit table. It was proposed that, in computing the benefit base, an individual's earnings'

history be indexed. Each year's covered earnings would be adjusted to levels prevailing near retirement. That is, the earnings' history would be expressed in (constant) dollars relative to current earnings' levels, and the benefit base would represent the average of indexed earnings.

Perhaps more important were changes in the benefit formula itself. This involved fixing (holding constant) the percentages of the benefit base used in computing the PIA and adjusting the wage brackets for changes in average wages and the taxable maximum. Holding constant the benefit percentage meant that the percentage of benefit base "replaced" no longer would grow with inflation. This was the key element of decoupling. In addition, by adjusting the brackets of the benefit formula, the bracket creep effect arising from the progressive benefit formula would be diminished, and real benefit levels could better keep pace with rising real wages. These key technical elements of decoupling were aimed at making future replacement rates more stable and predictable.

Although there was considerable debate over various technical issues and proposals, the policy debate centered on the role of social security in maintaining the incomes of the retired. This related to the appropriate replacement rate for retirees and whether the replacement rate should be constant, rising, or declining over time for successive cohorts of retirees. An important technical issue concerned how to index benefits (whether to prices or wages) as well as concern over the cost implications of the proposals for the system.

The first and perhaps most important proposal to surface came from the 1974 Advisory Council on Social Security.[14] This group of experts proposed a wage-indexed system for the benefit base and a benefit formula in which the percentages of the monthly wage awarded as benefits would be held constant. The Council's report recommended that the percentages allowed be set to keep benefits, hence replacement rates, at about "current levels," which can be interpreted as those prevailing at the time the report was presented (1974-75).[15] During this time, there

[14]There were other important discussions of decoupling. For example, proposals came from the Ford Administration, Robert J. Myers, and a panel led by Prof. William Hsiao, all suggesting alternatives and modifications. Notable is the Hsiao proposal to use price indexing rather than wage indexing in the revised benefit formula. This proposal would have led to declining average replacement rates and lower future costs for the system. For further detail, see Robert S. Kaplan, Indexing Social Security..., pp. 37-47.

[15]The percentages would have to be lowered considerably because the suggested wage-indexed benefit base would be considerably larger than the benefit base computed under the existing unindexed (AMW) method.

were also proposals in the Congress to return replacement rates to about the levels prevailing in 1972. These issues and proposals set the stage for continuing debate, which led to the 1977 Amendments to the Social Security Act. It was from this background that the adopted amendments to the benefit formula and the transition provisions developed and from which the notch issue emerged.

The Evolution of the Notch Issue: Technical Aspects

The 1977 Amendments to the Social Security Act instituted a new benefit formula that was intended to lower and stabilize future replacement rates for beneficiaries. In moving to the new benefit formula, the Congress debated various provisions as well as procedures for implementing the new law, and transitional benefit computation provisions were adopted. Subsequent to the implementation of these provisions, it became apparent in computing benefits for some retirees that there could be disparities of varying sizes in benefit amounts depending on whether benefits were computed under the "old" (pre-1977) formula or the "new" (1977) law and transition provisions. These disparities underlie the notch issue.

Changes to the Benefit Formula in the 1977 Amendments

In enacting the 1977 Amendments (Public Law 95-216) in December 1977, the Congress addressed a number of issues.[1] Perhaps the most important change was the revision of the benefit formula. Five new benefit calculations were adopted. The most significant, and the one we focus on in the following discussion, was the wage-indexed formula, which for convenience we will refer to as the new benefit formula.[2]

Consistent with the goals of decoupling discussed in chapter 2, the 1977 formula represented a new method for calculating the benefit base by indexing the earnings' record to account for the change in average wages in the economy over a worker's career. The new benefit base computation was called the average indexed monthly earnings (AIME).[3] The AIME was to be applied to a new formula to derive an individual's PIA, as follows:[4]

[1]Regarding the program's financing, the 1977 Amendments introduced a new schedule of tax rates to raise revenue and provided for increases in the maximum taxable earnings' ceiling above what would have occurred through the automatic indexing provisions. The increase in the ceiling would generate more revenues for the system in the near term while increasing the benefit base in later years for some individuals, who would have more earnings counted in the computation of benefits. For a more detailed discussion of the provisions adopted in the 1977 Amendments, see Robert J. Myers, Social Security.

[2]The other formulas were the transitional guarantee, the regular-minimum, the 1977 old-start method, and the disability benefit guarantee. See Steven F. McKay and Bruce D. Schobel, Effects of the Various Social Security Benefit Computation Procedures, Actuarial Study No. 86, SSA, Office of the Actuary, July 1981.

[3]In calculating the AIME, the earnings for each year after 1950 are multiplied by the ratio of (a) the national average wage in the second year before eligibility to (b) the national average wage in the particular year. Then the highest indexed earnings for the specified number of "averaging" or "computation" years are averaged and divided by the number of months in these years. See McKay and Schobel, pp. 3-4.

[4]The formula shown is applicable to those attaining first eligibility for benefits in 1979.

90% of AIME up to $180, plus
32% of AIME over $180 and up to $1,085, plus
15% of AIME over $1,085.

The key characteristics of the formula are (1) fixed benefit percentages and (2) annually adjusted bracket widths or bendpoints based on the change in average wage levels. Once the initial PIA is determined at the date of first eligibility, subsequent increases in it are based on the annual cost-of-living adjustment.

These basic changes addressed overindexing. By fixing the benefit percentages, the new formula decoupled benefit determination for future retirees from changes in prices. The AIME computation addressed the problem of giving higher weight in the formula to inflation-induced wage increases that occurred near retirement. Adjusting the bendpoints by the change in average wages alleviated the "bracket creep" arising from having fixed bendpoints in a progressive benefit formula under the old formula. Essentially, the new wage-indexed formula meant that future retirees' PIAs would be driven by wage growth before age 62 and by price change after age 62.

Lowering of Benefits and Replacement Rates

In the debate over revising the benefit formula, attention focused on setting the level of future replacement rates. The 1974 Advisory Council had recommended stabilizing rates at approximately the levels then prevailing;[5] some sought to return replacement rates closer to 1972 levels, before benefits were automatically indexed. The then-current administration considered setting future replacement rates at levels prevailing at the time of implementation of the new law.

Actually, in the adopted amendments, replacement rates were scaled back to eliminate some of the increase in benefits that had occurred since the early 1970's. It was anticipated that, when the new benefit provisions were fully implemented, replacement rates would be about 5 percent lower than the rate expected under the old law for a worker

[5]Historical data show that the replacement rate in January 1975 for an individual with career average earnings retiring at age 62 (ignoring actuarial reduction) was 42.3 percent; for a career low earner, 59.5 percent; for a career maximum earner, 30.1 percent. In close approximation, these were the replacement rate levels the Congress set about to achieve in the 1977 legislation. (Source: memoranda by Orlo R. Nichols, SSA, Office of the Actuary, dated April 7, 1987.) The projected replacement rates contained in the House report on H.R. 9346 were 55 percent for low earners, 43 percent for average earners, and 30 percent for maximum earners.

retiring at age 62 in 1979. This was reflected in lower benefit percentages in the new formula.[6] The anticipated effect of decoupling on the replacement rate for age 62 retirees (ignoring actuarial reduction) in various years, based on the economic assumptions employed in 1977, is shown in figure 3.1.

For various technical and policy reasons, the Congress also chose to index the earnings' histories of workers according to the time a worker initially becomes eligible for benefits (age 62) rather than the time of retirement. As a result, earnings after age 60 are not indexed; rather, these earnings are counted at their nominal value, and individuals use the benefit formula applicable to them at age of eligibility, regardless of the actual year of retirement.[7] Individuals do, however, receive the benefit of all CPI increases that occur in and after the year they turn 62. The net result is that replacement rates (based on 100 percent of PIA) measured against preretirement earnings are generally lower for those who retire after age 62 and by a greater amount than under the old law. It has been noted that the additional reduction in replacement rates resulting from indexing earnings' histories was about 2 percent (on average, when measured against all beneficiaries).[8]

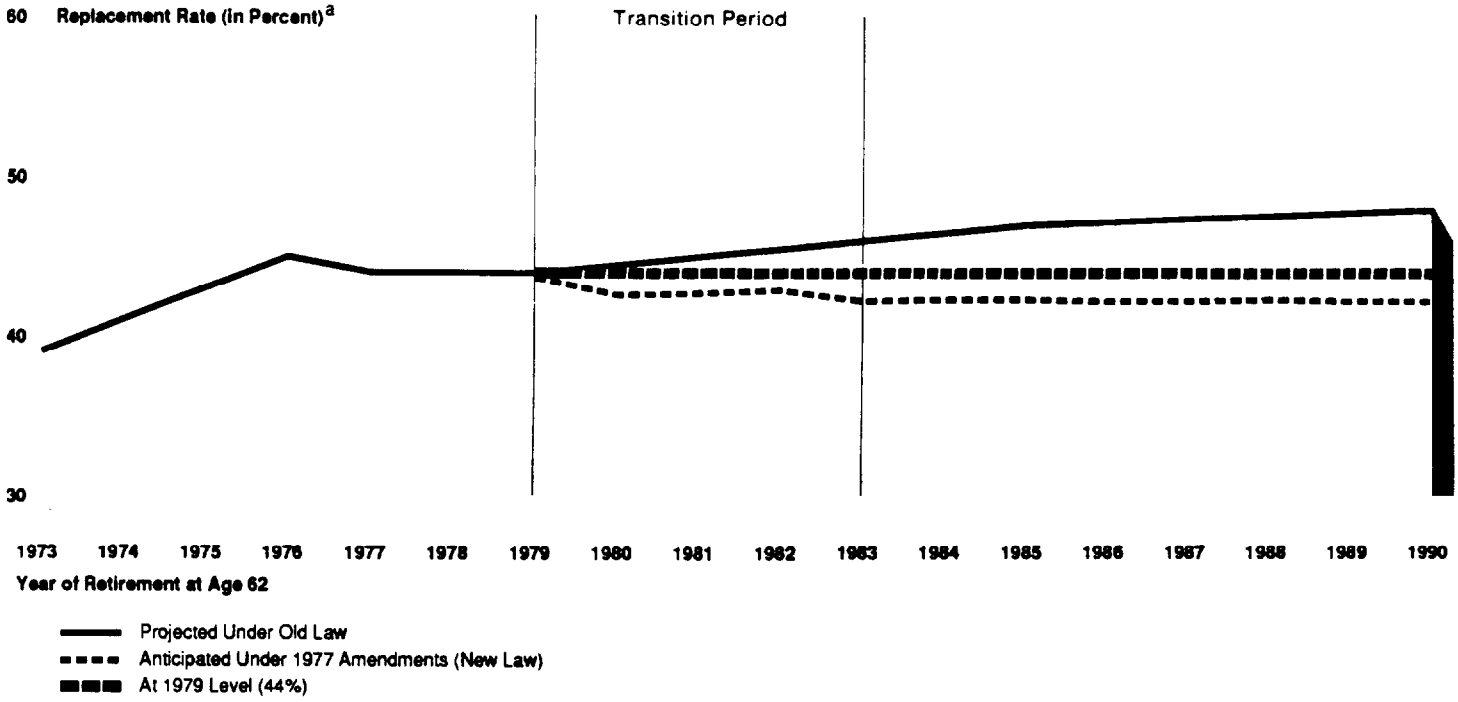
Under the new law then, indexing the earnings' history means that an individual's replacement rate (and benefit) does not increase as significantly for additional years of work and retirement past age 62 as it would under the old law (see figure 3.2). In the 1977 Amendments, the delayed retirement credit was increased from 1 to 3 percent for those

[6]Robert Myers notes that, "Both the Ford and Carter Administrations had recommended no ... reduction, but Congress did so (upon testimony to this effect by the life insurance business, supported by other business groups)." See Myers, p. 227.

[7]The Congress considered making the new law/transition provisions applicable to anyone, regardless of age of eligibility or birth year. As discussed in Myers, pp. 328-330, considerations were weighed as to whether to index the earnings' record to the time of retirement (filing initial claim) or to the earliest age of eligibility (usually age 62). Although the time of filing a claim initially was considered the more logical choice for determining the point of indexing the earnings' record, problems were anticipated. This would allow individuals, through selecting a retirement date, to select the indexing year as well. Results could differ depending on this filing date, and differences in information available to those nearing retirement might result in considerable variation in benefits among individuals. As a result, the time-of-eligibility approach was adopted for indexing. In addition, Myers notes that for administrative reasons and because of a time lag in obtaining data necessary in the indexing process, the second year prior to eligibility for benefits must be used—that is, age 60 for retiring workers. Any negative effect of this provision is largely offset by the use of slightly larger benefit percentage factors in the benefit formula.

[8]Myers, pp. 328-329.

Figure 3.1: Anticipated Effect of Decoupling on Replacement Rate for an Average Earner at 62



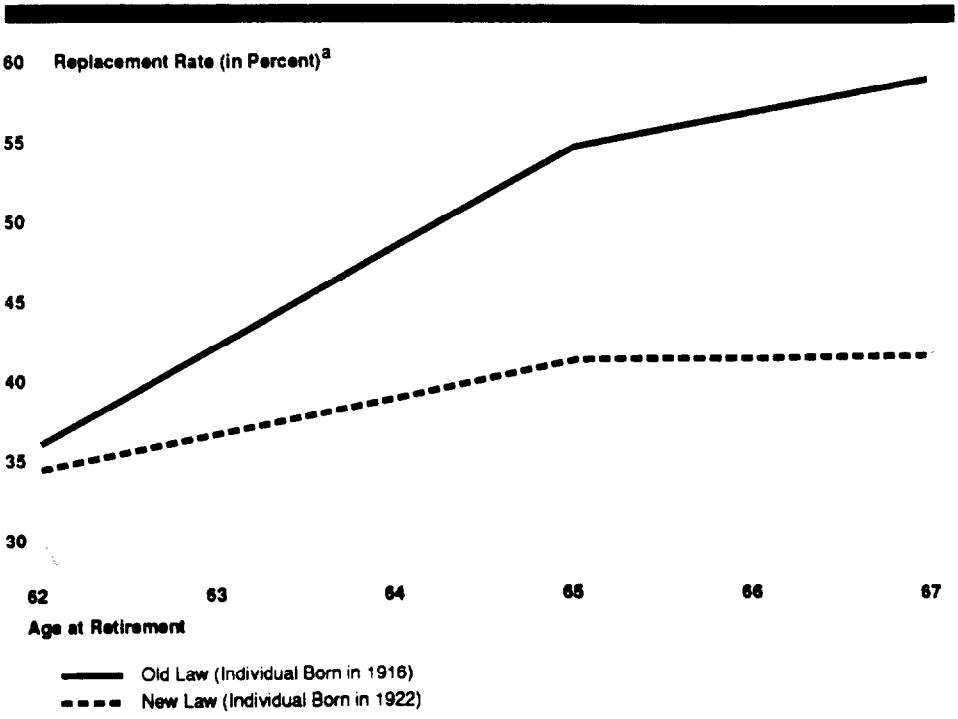
[a]Based on 100% PIA.
Source: House Report on H.R. 9346 and SSA.

Note: For period 1979-90, rates are projections based on 1977 Trustees' assumptions

retiring after age 65, who cannot use the old AMW method, to mitigate some of this effect.[9]

[9]A delayed retirement credit was applied to the benefits of those who retire after age 65. It was introduced because some felt that the earnings' test took away benefits from some without a concomitant increase for those who delayed receiving benefits past age 65. Note that the 1983 Amendments changed the rate to 8 percent in a phased-in procedure, beginning for those attaining age 65 in 1990 and reaching 8 percent in 2009 (for those attaining age 66, the "normal retirement age" at that time). See Myers, pp. 227-228.

Figure 3.2: Effect of Decoupling on Replacement Rates for an Average Earner After Age 62



[a]Adjusted for actuarial reduction for retirement before age 65, but not delayed retirement credit thereafter.

Source: SSA

On average under the new formula, replacement rates could be expected to be about 7 percent lower (including the 5-percent reduction embodied in the new formula benefit percentages and the 2 percent noted above). This difference was expected to vary between about 5 percent for those awarded benefits under survivor or disability provisions prior to age 62 or for retirement at age 62 and about 10 percent for those retiring at age 65 and over, compared with expected replacement rates in 1979 under the old law formula.[10] Thus, it could be said that a small notch was created by this intended lowering of replacement rates.

The Transition Provisions

In the debate over decoupling and the consideration of legislation, implementation was an important concern. The Congress decided to make the new law/transition rules (but not the old rules) apply to those who

[10]For more detailed discussion see Myers, pp. 328-330. Also see A. Haeworth Robertson, "Financial Status of Social Security Program After the Social Security Amendments of 1977," Social Security Bulletin, Vol. 41, No. 3, Mar. 1978, pp. 22-24.

attain eligibility age on a certain date. As the goal was to fix the benefit formula as quickly as possible, the effective date chosen for the new rules was January 1, 1979.[11] This decision created a sharp break, by date of birth, between those who would come under the new law and those who would continue to have their benefits computed using the pre-1977 rules. Legislative consideration of how the transition would be made from the old to the new formula focused on (1) the time period and retiree cohort to which the transition provisions would apply[12] and (2) a transitional benefit computation known as the "transitional guarantee."

To alleviate the drop in benefits for some that might occur under the new law, the 1977 Amendments introduced a new benefit computation called the "transitional guarantee." This was broadly intended to "guarantee" that benefits for those under the new law would not be lower than would have been received at age 62 (first eligibility for benefits) under the old law at the time of implementation of the Amendments. Based on the pre-1977 benefit formula, it applied to individuals receiving OASI benefits who attained age 62 in the period 1979-83 (i.e., those born in the years 1917-21). For those beneficiaries, benefits were calculated two ways, by the new-wage indexed formula and by the transitional guarantee formula. The higher of these two computations was paid as the actual benefit.

The transitional guarantee froze the old law benefit table in effect in December 1978 and the transitional group was "guaranteed" benefits no lower than would be calculated using it. However, this table was no

[11]The decision to apply the new law/transition provisions to those reaching eligibility age (age 62) after January 1, 1979, was not arbitrary, as is sometimes alleged. The alternative was to allow individuals to use the old rules (and/or new rules) as long as they filed for benefits by a certain date—irrespective, however, of their birth year/age of eligibility. The concern was that such provisions might induce many individuals to file for benefits at age 62 even though they were not actually retired in order to lock in the old law benefit formula (i.e., "rush to the rolls"). Another factor was that those with relatively few years of covered earnings might be able to file for benefits, lock in the old rules, then work several more years. They could then file for recomputation based on their additional work and, because they had locked in the old rules, receive a substantially higher benefit. This effect might even be present for some individuals who worked as little as a few additional days after filing for benefits. See U.S. Congress, House Committee on Ways and Means, Subcommittee on Social Security, Hearings on Employer Payment of Social Security Taxes; Benefit Formula Differential, 96th Congress, 1st Session, Sept. 27, 1979.

[12]The form of the transition provisions was debated throughout the approximately 2 years prior to adoption of the Amendments. Although a number of different transition provisions were proposed and discussed during this time, the provision that actually passed was essentially identical to that contained in the social security legislation introduced by the Ford Administration in the 94th Congress. See U.S. Congress, House, Committee on Ways and Means, Subcommittee on Social Security, Hearings on Decoupling the Social Security Benefit Structure, H.R. 14430, 94th Congress, 2nd Session. June 18, July 23 and 26, 1976, pp. 77-78.

longer adjusted for changes in prices for the transition group although it continued to be adjusted and used in computing benefits for those who attained age 62 prior to 1979 and came under the old law formula. Those in the transition group did not receive the benefit of CPI increases after 1978 and before their year of eligibility (age 62) under the transitional guarantee although, of course, they received such increases for the year of attaining age 62 and thereafter.

In addition, the benefit base computation was modified under the transition formula. In computing the AMW under the transitional guarantee, only earnings prior to the year of attaining the age of eligibility (age 62) were included. Those eligible for benefits prior to 1979 continued to have any earnings after age 61 included in the calculation of their AMW. Post-age 61 earnings for those in the transition group were included in benefit calculation only under the new wage-indexed formula.

Thus, the transitional guarantee was generally consistent with the goal of decoupling in that price changes did not affect the benefit formula. But the transitional guarantee also prevented earnings from being included for the segment of the transition group who worked past the age of 62. To some extent, this went beyond the goal of decoupling,[13] but was consistent with the goal of moving rapidly into the new benefit formula. The cost of extending the transition was a major concern of the Congress, which was trying to stabilize the system's financing and reduce costs in the short term.

Length of the Transition

Another aspect of the transition provisions concerned the size of the transition group or the number of age cohorts to which the transition provisions applied. In the early legislation proposed by the Ford Administration, in the legislation proposed by the Carter Administration, and in an amended bill passed by the House, a 10-year transition period was specified. Thus, the transitional guarantee formula would apply to those reaching age 62 in 1979-88. At the same time, the Senate passed an amended bill that included a 5-year transition period that would apply to those turning age 62 in the period 1979 through 1983. In the final

[13]By this we mean that decoupling was intended to prevent inflation from directly affecting the benefit determination of future retirees. It was not intended to prevent wages from affecting the PIA as did the exclusion of post-age 61 earnings.

conference that resulted in the 1977 Amendments, the House receded to the Senate provision and the 5-year transition was adopted.[14]

The length of the transition period was discussed in hearings on the Ford Administration bill, which proposed the 10-year transition. The following exchange between Congressman Bill Archer and then-Social Security Commissioner James B. Cardwell demonstrates some of the reasoning behind the transition provisions.

"Mr. Archer: I am interested in your proposal for a 10-year phase-in. Why not just have it take effect immediately? Why any phase-in at all?

Commissioner Cardwell: I think it is a good question. I guess our reaction to that question reflects our conditioning. We assume that under the tradition of this program that it is unfair to individuals to catch them on short notice. It turns out since you can't perfect a formula that works on averages, to guarantee automatically everybody will be treated as under present law, as the formula intends. We know that individuals could receive less under this formula than they would receive under existing law. We said the transition would avoid catching them off guard.The transition really says 10 years from now everybody must recognize that the new formula is fully effective - it is kind of a 10-year notice. You could make the choice not to do it. We included it because it seemed to us it was fair, but that is a judgmental matter in many ways.

Mr. Archer: What cost factor are we looking at if we did it in a 10-year period as opposed to immediately?

Commissioner Cardwell: You are talking about close to a billion dollars.

Mr. Archer: You say it would save close to a billion dollars if we put it into effect immediately rather than over a 10-year period?

Mr. Cardwell: Yes, through 1981. There would be additional savings in later years. A 5-year transition period would cost almost as much. As I indicated earlier, the long term cost of a 5-year period would be about 90-95 percent of the long term cost of the 10-year period."[15]

This excerpt indicates that a main purpose of the transition provisions was to "put people on notice" that a change in the benefit formula was in effect, avoiding a serious impact on those who were close to making retirement plans. The cost of a 5-year transition was not expected to be

[14]House of Representatives, Social Security Amendments of 1977, Conference Report to Accompany H.R.9346, 95th Congress, 1st Session, Dec. 15, 1977, p. 67.

[15]House of Representatives, Ways and Means Committee, Hearings on Decoupling, 1976.

substantially different than the proposed 10-year transition. The transitional guarantee was, for the most part, expected to phase out, in terms of providing a higher benefit relative to the new wage-indexed computation, within 5-years. Extending the provisions to 10 years would have affected only a small percentage of beneficiaries.[16]

Thus, it was not the length of the transition period that mattered in terms of cost or effect on beneficiaries. Rather, it was the design of the transition formula and the benefit it would yield compared with the benefit under the new formula that would determine the effect of the transition provisions.

How the Transition Worked

Generally, the transitional guarantee computation was intended to phase into the new wage-indexed formula. Initially, it could be expected to result in higher PIAs and benefit awards than under the new formula for some retired workers. Eventually, the benefit formula frozen as of December 1978, the exclusion of post-age 61 earnings, and absence of CPI increases after 1978 and before the age of eligibility were expected to result in less favorable benefit amounts, compared with the results of the new formula, thus reducing over time the proportion of newly retired workers helped by the guarantee. Thus, the new formula would provide the higher benefit for an increasing number of new retirees as the transition period wore on.

Subsequent to the adoption of the 1977 Amendments, the rate of inflation once again began to increase significantly more than expected. Those born before 1917 who attained eligibility age before 1979 thus remained under the old law formula and continued to receive the benefit of the overindexed formula. Under the transition provisions, more rapid inflation did not have a similar effect on the initial benefit. The new wage-indexed formula was not driven by price inflation before retirement, although higher wage growth could increase the benefit amounts. The transitional guarantee was essentially fixed, however, unaffected by price change, and additionally, beneficiaries could only include earnings up to age 62. Any earnings beyond age 62 were counted only under the new wage-indexed formula. In the context of higher-than-expected inflation, the design of the transition provisions meant that the new wage-indexed formula overtook the transitional guarantee formula,

[16]Estimates showed that fewer than 5 percent of those retiring in each year of year 6-10 of the transition period would have received a benefit computed under the transitional guarantee. House of Representatives, Social Security Amendments of 1977, Report to Accompany H.R. 9346, 95th Congress, 1st Session, Dec. 15, 1977, p. 29.

yielding a higher benefit for more retirees and more quickly. The transition phased out more abruptly than anticipated.

An SSA study calculated benefit levels using the hypothetical but representative steady earnings' histories for those in the transition group.[17] Comparing the benefit level under the new wage-indexed formula with that of the transitional guarantee, the study shows that the transitional guarantee yielded a higher benefit only to

- those attaining age 62 in 1979,
- average and maximum earners attaining age 62 in 1980 and retiring at age 62, and
- maximum earners attaining age 62 in 1980 and retiring at age 63.

In almost all other cases, the new wage-indexed formula resulted in a higher benefit for those in the transition group. In the SSA study, data based on a sample of retirees reflecting actual earnings patterns, also shows that for those born in 1917 who retire at ages 62-65 and use either the wage-indexed or the transitional guarantee, half or more received higher benefits under the latter method. For those who attained age 62 in January 1980 (born 1918) and retired at age 62 or 63, less than half—but a significant portion—found the transitional guarantee yielded the higher benefit. But for those retiring at age 64 or 65, the percentage using the transitional guarantee dropped dramatically (to 15 and 9 percent respectively). For those in the 1919, 1920, and 1921 birth cohorts, only a small proportion (less than 10 percent) found that the transitional guarantee yielded a higher benefit than the new wage-indexed formula.

Effects on Benefit Levels

During the debate on the 1977 Amendments, it was generally anticipated that the phase-in would prevent a significant drop in the benefit levels of retirees in the transition period. Even so, it was well recognized that the goal of reducing replacement rates implied at least a relative reduction in the growth of benefit levels. What actually occurred, however, was that many in the transition group received a benefit that was lower in dollar amount compared with the group that retired just prior to the transition, whose benefits were computed

[17]McKay and Schobel, pp. 9, 18.

under the old law.[18] But this was not the result of transitional retiree's benefits being much lower than intended. Rather it occurred because beneficiaries under the old law received benefits that increased more rapidly than was anticipated when the 1977 Amendments were passed.[19]

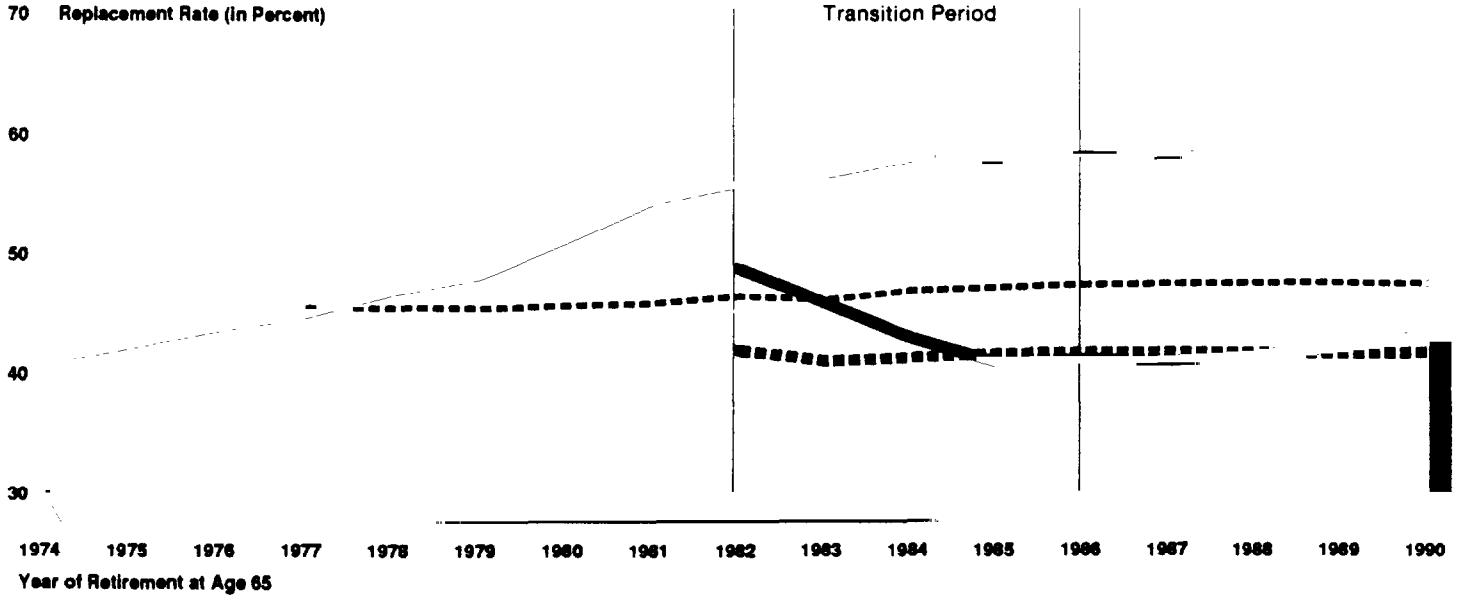
Higher-than-anticipated growth of prices and wages resulted in higher replacement rates for those receiving benefits under the old law (see fig. 3.3). At the same time, while those under the new law/transition provisions saw the transitional guarantee phase out rapidly, new law replacement rates also rose more than expected. The notch that existed due to the 1977 Amendments became much greater. Inflationary conditions had raised everyone's benefits, but benefits under the old law rose relative to those under the new law. [20]

[18]This result may have been largely unforeseen as it is difficult to find evidence pointing to an awareness of the effect on the part of the Congress. This aspect is discussed in a recent study by the American Enterprise Institute (AEI), "Proposals to Deal With the Social Security Notch Problem," Legislative Analyses, Washington, D.C., 1985. The study notes that the Congress probably thought that, even though it was cutting benefit levels for those under the new law, the actual nominal benefit levels between cohorts would rise over time. This would be due to the normal pattern of rising wage levels, which generally resulted in rising benefit levels. If earnings (which affect the denominator of the replacement ratio) are rising over time and benefit levels are not rising or rising more slowly, a lowering of replacement rates can occur even though nominal benefit amounts are not lower.

[19]Not all individuals in the transition group found the transition rules disadvantageous compared with what they might have received under the old law formula. This would largely depend on an individual's earnings' history. For example, if an individual had a history of high earnings early in his/her career with lower earnings toward the end, the new wage-indexed formula might yield a higher benefit award than the old law formula.

[20]This is not meant to imply that higher inflation alone was the cause of the notch. The disparities would have arisen regardless, due to the provisions of the new law. Our point is that higher inflation than anticipated made the disparities greater. An SSA actuary notes that "economic experience is actually a relatively small factor in the size of the notch." Furthermore he says, "While the actual notch numbers are larger than they would have been based on the 1977 Trustees' Report, the difference is not sufficient to suggest that the 'notch' would have been significantly less controversial if economic experience had been different." (Memorandum from Roy Ferguson, Actuary, SSA Office of the Actuary, "A Look Back at the Decoupling Estimates—Information," Aug. 26, 1986).

Figure 3.3: Anticipated and Actual Replacement Rates for an Average Earner Retiring at Age 65, Under Old and New Laws



Source: SSA

Magnitude and Definition of Benefit Disparities

That the transition rules were not working as expected was recognized shortly after the 1977 Amendments had been implemented. Hearings relating to the notch benefit disparity were held by the House Ways and Means Committee in September 1979. During the hearings, Social Security Administration officials explained the dimensions of the problem.[1] It was noted that a worker who turned age 62 in 1978 and continued to work until age 65 would, upon retirement, receive a somewhat higher benefit than a similar worker who turned 62 in 1979 (the first year of the transition) and continued to work until age 65. The officials further explained that the differential arose out of a set of conscious decisions on the part of the Congress in the 1977 Amendments. These decisions were that:

1. Benefits had been overindexed and produced higher amounts than desired. As a result, the Congress voted to reduce replacement rates.

2. Those who were nearing age 62 at the time should be entitled to benefits under the old law even though they were receiving slightly higher amounts than intended. But workers should begin to be converted to the new system as rapidly as possible. Thus, the date of January 1, 1979, was chosen for implementation of the transition provisions.

It was explained that a differential between adjacent cohorts of retirees (under old and new law) arose because, under the new system, benefits do not rise as rapidly after age 62 as a result of additional work. This is due to indexing of the earnings' record under the wage-indexed computation and exclusion of post-age 61 earnings under the transitional computation. One factor mitigating this effect was that the 1977 Amendments increased the credit for delayed retirement from 1 to 3 percent for persons attaining age 62 after 1978. However, this applied only to those delaying retirement past age 65.

Although the focus of the benefit formula revision and the reasons for the existence of a notch center on replacement rates, much of the public discussion of the notch relates to the size of benefit disparities between different cohorts of retirees. At the same time, the size of a benefit disparity can depend on the type of comparison made.

[1] House of Representatives, Committee on Ways and Means, Employer Payment of Social Security Taxes, statement of Lawrence H. Thompson, Acting Associate Commissioner for Policy, SSA. pp. 10-14.

Data on Benefit Disparities

In terms of benefit amounts, the most common way to define the notch is to compare the initial benefits of retirees in the transition group with the last cohort to receive benefits under the old formula. The initial monthly benefits of individuals who turned age 62 in January 1979, 1980, and 1981 are compared with those of an individual reaching age 62 in December of the previous year in table 4.1. The data, which are for average steady earners, illustrate the disparities associated with the notch. The December 1978 (born 1916) retiree is the only case in the table receiving benefits under the old benefit formula—all others are in the transition group.

Note the differences between the December and January retirees. Cases 1 and 2 compare an age 62 retiree born in December 1916 with an age 62 retiree born only a month later in January 1917. The difference in benefits is calculated in dollar amounts and as a percentage of the benefit of the older of the two adjacent retirees. For the age 62 retirees, the difference is about $6 per month. The differences get larger for later retirees in the 1917 cohort. At age 65, the difference is $88 per month or 14 percent less than a comparable 1916 cohort retiree. The difference for age 66-68 retirees is even higher, about 17 percent, as are the dollar amounts. Comparing the 1916 and 1917 cohorts in percentage terms, the benefit difference levels out after age 65. This is due largely to the effect of increasing the delayed retirement credit. Nevertheless, nominal dollar differences vary, and those in the $125 and above range underlie the concern over the effect of the transition provisions. Although in all cases the benefit rises for later retirement ages, the benefit of the individual under the old formula rises by a much greater amount than for the individual under the new law/transitional provisions.

Table 4.1: Comparison of Initial Monthly Benefit for Persons Attaining Age 62 in Selected Months and Retiring at Various Times in Adjacent Months (1978-1981)

Case no.	Workers[b] characteristic	Monthly benefit[c] if retirement in January of						
		1979	1980	1981	1982	1983	1984	1985
	At age	62	63	64	65	66	67	68
	Attained age 62 in:							
1	Dec. 1978 (born 1916)	$313	$389	$500	$624	$716	$773	$834
2	Jan. 1979 (born 1917)	307	365	449	535	592	638	691
	Difference in benefit (2-1):							
	Dollars	−6	−24	−51	−88	−124	−135	−143
	Percent	−1.9	−6.2	−10.2	−14.1	−17.3	−17.5	−17.1
	At age	•	62	63	64	65	66	67
	Attained age 62 in:							
3	Dec. 1979 (born 1917)	a	$339	$420	$503	$576	$621	$674
4	Jan. 1980 (born 1918)	a	316	393	475	553	596	645
	Difference in benefit (4-3):							
	Dollars	a	−23	−27	−28	−23	−25	−29
	Percent	a	−6.8	−6.4	−5.6	−4.0	−4.0	−4.3
	At age	•	•	62	63	64	65	66
	Attained age 62 in:							
5	Dec. 1980 (born 1918)	a	a	$366	$444	$519	$581	$628
6	Jan. 1981 (born 1919)	a	a	344	416	485	542	585
	Difference in benefit (6-5):							
	Dollars	a	a	−22	−28	−34	−39	−43
	Percent	a	a	−6.0	−6.3	−6.6	−6.7	−6.1

[a]Not applicable.

[b]Average earner

[c]Dollar amounts are rounded.

Source: Computed by GAO using SSA's PIA computation software prepared by Steven F. McKay and John F. Dickstein, SSA, Office of the Actuary.

Data for the two other sets of retirees illustrate that there are also notches between adjacent cohorts within the transition group. That is, the individual turning a given retirement age in January compared to December has a smaller benefit. However, at later points in the transition group (i.e., those born 1918-21), the differences in both dollar amount and in percentage terms are relatively much smaller. Differences are in the $20-30 range, which, although not inconsequential, vary only in the 4-6 percent range.

These "small notches" get even smaller for successive cohorts and by the end of the transition period, turn positive for the January retiree, a pattern consistent with the effect to be expected from rising wages over time. What the data imply is that the notch disparity is greatest and

most clearly demonstrated by comparing the 1916 and 1917 cohorts, particularly those who retire at later ages. Furthermore, the notch effect is associated with benefits for the 1916 cohort rising faster than those of the 1917 cohort for later retirement ages.

The differences for the 1916 and 1917 cohorts by level of career earnings appear in table 4.2. The benefit awards display the following patterns:

1. The later an individual in the 1917 cohort retires, the greater tends to be the resulting disparity compared to the 1916 cohort.

2. The higher the level of a worker's lifetime earnings (earnings' history), the greater the disparity tends to be.

Other Ways to View the Notch

Defining the notch disparity as essentially a benefit disparity between the 1916 and 1917 cohorts is probably the most clear and valid representation of the notch. But there are other ways to look at the notch, and distinguishing between comparisons is important in any discussion of the notch issue. To a considerable extent, the size of the notch depends on the type of benefit comparison being made. One difficulty that arises is in comparing benefit levels across cohorts over a span of years. For example, comparison of the current dollar initial benefit (or PIA) of retirees in various years, at comparable ages, would show a generally rising pattern over time. Between January and December, the PIA for our typical individuals would rise (as a result of higher earnings generally). While the small notches mentioned above still are present between adjacent December and January retirees, the year-to-year differences in benefit awards between successive years of the transition group generally do not become greater. That is, if successive initial benefit awards (i.e., current-dollar PIA) of those retiring (at comparable ages) were compared with the previous cohort under the old law, the differences for these successive cohorts do not, in general, get larger (see fig. 4.1).

Table 4.2: Comparison of Initial Monthly Benefits for Adjacent 1916 and 1917 Birth Cohorts by Earnings' Category

Retirement in January of (year), by earnings' category[a]	Monthly benefit[b] for worker attaining age 62 in		Difference	
	December 1978 (old law)	January 1979 (new law)	$	%
1979:				
Low earner	$207	$204	$−3	−1 4
Average earner	313	307	−6	−1 9
Maximum earner	396	389	−7	−1 8
1980:				
Low earner	254	242	−12	−4 7
Average earner	389	365	−24	−6 2
Maximum earner	494	463	−30	−6 1
1981:				
Low earner	325	298	−26	−8 0
Average earner	500	449	−51	−10 2
Maximum earner	636	570	−66	−10 4
1982:				
Low earner	400	355	−45	−11 3
Average earner	624	535	−88	−14 1
Maximum earner	790	679	−111	−14 1
1983:				
Low earner	449	392	−57	−12 7
Average earner	716	592	−124	−17 3
Maximum earner	901	755	−146	−16.2

[a]Low earner: Worker had earnings equal to 2,080 times the hourly federal minimum wage in each year

Average earner: Worker had earnings in each year equal to the annual average wage figure used for indexing earnings record.

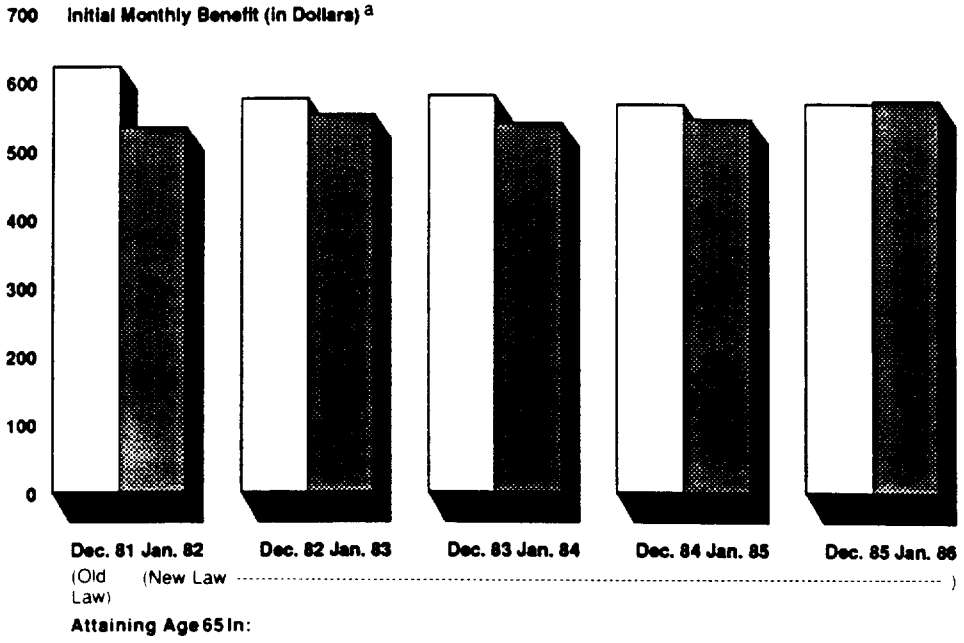
Maximum earner: Worker had earnings equal to the maximum social security contributions and benefit base in each year.

Source: Derived from information published in SSA Program Circular - Public Information, No 1244, Oct 1985.

One difficulty this comparison presents is that it is not generally appropriate to make nominal dollar comparisons of initial benefits across years, even if retirement age is held constant. For any given individual, benefit comparison with an earlier benefit ignores the fact that earlier retirees have received COLAs since retirement. Thus, comparison of benefit levels for individuals retiring at comparable ages in different years is more appropriately accomplished by presenting data in constant dollar terms.[2]

[2]Application of COLAs to retiree PIAs tends to widen the disparities between old law and transition benefits.

Figure 4.1: Initial Monthly Benefit of an Average Earner Retiring at Age 65 in Various Years and Adjacent Months



[a]Calculated as of January

Such data on individual benefits payable in 1987 for those retiring at ages 62 and 65 from 1972-87 is presented in table 4.3. These can be considered as the current monthly benefit in January 1987 of those retiring at the given age in January of various years.[3] Generally, the initial PIA at retirement is adjusted for cost-of-living increases granted previous years' retirees, and this is compared with other retirees' monthly benefits as of January 1987. This table shows what retirees in various years now get in today's dollars.

Benefit levels peak in the first year of the transition for age 62 retirees and in the last pretransition year for age 65 retirees, as table 4.3 shows. For age 62 retirees, the last year under the old formula was 1978 and for age 65 retirees the year was 1981. The constant-dollar benefit levels for retirees under the old formula generally are higher than for those of comparable age retirees under the new benefit formula and transitional

[3]The benefits being compared are for January retirees. The earlier discussion compared the more closely adjacent December and January retirees. Thus, the "peak" benefit would be higher if a December 1978 benefit were calculated. However, while it is useful to compare December 1978 and January 1979 retirees, it is somewhat less appropriate to use the December benefit when comparing across a number of years.

guarantee. Table 4.4 groups these data by birth year and age of retirement with the difference in benefits between the transition and peak years calculated. These differences display a pattern—the percentage benefit differences grow in successive years compared with the January 1978 benefit amount. However, by the end of the transition period the differences begin to narrow.[4] Also, the dollar differences tend to be greater in the age 65, average and maximum earnings' categories. For age 62 retirees, the percentage differences between the transition group benefit and that of the 1916 birth cohort under the old law vary in the +3.0 to −10.9 percent range. For age 65 retirees, the differences vary in the −7.6 to −19.6 percent range.

Table 4.3: Monthly Benefits in 1987 of Workers Retiring in 1972-87 at Ages 62 and 65

Year in which benefits began	Monthly benefits,[a] by earnings level					
	At age 62[b]			At age 65		
	Low	Avg.	Max.	Low	Avg.	Max.
1972	$318	$459	$517	$386	$554	$627
1973	324[c]	462	526	391	563	643
1974	323	474	543	395	576	663
1975	326	481	562	400	589	688
1976	326	485	580	409	609	733
1977	331	491	606	417	630	781
1978	333	504	633	430	655	822
1979	**341[d]**	**514[d]**	**652[d]**	439	671	844
1980	**323[e]**	**482[d]**	**615[d]**	453	688	873
1981	**308[c]**	**459[e]**	**577[e]**	461	711	904
1982	**308[c]**	**449[e]**	**570[e]**	**426[d]**	**643[d]**	**816[c]**
1983	**308[c]**	**461[e]**	**588[e]**	**412[e]**	**618[e]**	**793[e]**
1984	312[e]	469[e]	604[e]	**390[e]**	**586[e]**	**760[e]**
1985	316[e]	475[e]	617[e]	**385[c]**	**572[e]**	**749[e]**
1986	324[e]	488[e]	638[e]	**385[c]**	**583[e]**	**769[e]**
1987[f]	332[e]	502[e]	662[e]	391[e]	593[e]	789[e]

[a]In 1987 dollars.

[b]Adjusted for early retirement reduction.

[c]Based on special minimum computation.

[d]Based on transition guarantee computation.

[e]Based on new wage-indexed formula.

[f]Projected.

Source. SSA

[4]These differences will result in part from varying rates of wage growth for those yet to retire compared with the rate of price growth affecting the benefits of those already retired.

Table 4.4: Monthly Benefits in 1987 of Workers Retiring at Ages 62 and 65 and Difference Compared With 1916 Cohort

	If retirement at age 62: monthly benefit[a] year of birth (and year of retirement[b])					
Earnings' level	**1916 (1978)**	**1917 (1979)**	**1918 (1980)**	**1919 (1981)**	**1920 (1982)**	**1921 (1983)**
Low	$333	$341	$323	$308	$308	$308
Difference	•	+8	−10	−25	−25	−25
(percent)	•	(+2.4)	(−3.0)	(−7.5)	(−7.5)	(−7.5)
Average	504	514	482	459	449	461
Difference	•	+10	−22	−45	−55	−43
(percent)	•	(+2.0)	(−4.7)	(−8.9)	(−10.9)	(−8.5)
Maximum	633	652	615	577	570	588
Difference	•	+19	−18	−56	−63	−45
(percent)	•	(+3.0)	(−2.8)	(−8.9)	(−10.0)	(−7.1)
	If retirement at age 65: monthly benefit[a] by year of birth (and year of retirement[b])					
Earnings' level	**1916 (1981)**	**1917 (1982)**	**1918 (1983)**	**1919 (1984)**	**1920 (1985)**	**1921 (1986)**
Low	461	426	412	390	385	385
Difference	•	−35	−49	−71	−76	−76
(percent)	•	(−7.6)	(−10.6)	(−15.4)	(−16.5)	(−16.5)
Average	711	643	618	586	572	583
Difference	•	−68	−93	−125	−139	−128
(percent)	•	(−9.6)	(−13.1)	(−17.6)	(−19.6)	(−18.0)
Maximum	904	816	793	760	749	769
Difference	•	−88	−111	−144	−155	−135
(percent)	•	(−9.7)	(−12.3)	(−15.9)	(−17.2)	(−14.9)

[a]In 1987 dollars.

[b]Retirement in January of year.

Data on Replacement Rates

While benefit amounts are important in illustrating the benefit disparities arising from the 1977 Amendments, they are not the only way to view the notch and the impact it may have on beneficiaries. As discussed in chapter 3, most of the analysis and debate surrounding the pre-1977 benefit rules were conducted in terms of replacement rates. It is usually considered more appropriate to compare benefit levels across cohorts and years by means of the replacement rate. Replacement rate data for retirees at age 62 and age 65 are provided in table 4.5.[5]

[5]The age 62 rates represent 100 percent of PIA, while, because of the reduction for early retirement, the actual benefit paid (and replacement rate) is approximately 20 percent lower. However, the rates given in the table are valid for relative comparison across cohorts.

Table 4.5: Replacement Rates for Workers Retiring at Ages 62 and 65, by Earnings' Level

	Replacement rates for retirement, by earnings' level at					
	At age 62[a]			At age 65		
Year of retirement	Low	Avg.	Max.	Low	Avg.	Max.
1965	38.5%	30.6%	32.1%	40.0%	31 4%	32 9[c]
1970	41.2	33.1	28.2	42.7	34 3	29 2
1971	45.9	35.1	31.5	47.5	36.6	32 8
1972	49.5	36.5	34.3	51.2	37.7	35 5
1973	61.3[e]	38.3	34.6	61.3[e]	39.2	35.5
1974	64.3[e]	40.6	32.6	64.6[e]	40.9	33 0
1975	59.5[b]	42.3[b]	30.1[b]	59.5	42.3	30 1
1976	57.2	43.1	31.5	57.9	43.7	32 1
1977	56.6	43.6	32.4	57.2	44.8	33 5
1978	60.8	44.9	33.5	62.7	46.7	34 7
1979	**58.6[c]**	**46.1[c]**	**34.9[c]**	60.4	48.1	36 1
1980	**57.2[d]**	**44.8[c]**	**28.6[c]**	64.0	51.1	32 5
1981	**57.3[e]**	**43.9[d]**	**26.7[d]**	68.5	54.4	33.4
1982	**57.7[e]**	**42.6[d]**	**25.0[d]**	**63.8[c]**	**48.7[c]**	**28.6[c]**
1983	**59.6[e]**	**42.7[d]**	**24.4[d]**	**63.7[d]**	**45.8[d]**	**26.4[c]**
1984	62.5[d]	42.9[d]	23.6[d]	**62.4[d]**	**42.9[d]**	**23.7[c]**
1985	65.4[d]	42.5[d]	23.5[d]	**63.8[e]**	**40.9[d]**	**22.8[c]**
1986	69.0[d]	43.1[d]	23.9[d]	**65.7[e]**	**41.2[d]**	**23.1[c]**
1987[f]	72.0	43.4	23.7	67.6	41.0	22.6
1990[f]	73.3	42.9	24.4	73.9	43.2	24 8
2000[f]	70.1	42.7	26.3	68.9	41.3	25.4
2010[f]	66.4	42.7	28.1	65.1	41.3	27 1

[a]Based on 100 percent PIA.

[b]The projected replacement rates in the House Report on H.R. 9346 (1977 Amendments) were 55 percent for low earners, 43 percent for average earners, and 30 percent for maximum earners. The 1974 Advisory Council goal to stabilize replacement rates at current levels can be represented above by the 1975 (actual) level of replacement rates for age 62 retirees.

[c]Based on transitional guarantee computation.

[d]Based on new wage-indexed computation. For age 62, years 1979-83 represent transition period for age 65, and 1982-86 represent transition period.

[e]Based on special minimum computation.

[f]Projected.

Source: Tables compiled by Orlo R. Nichols, Actuary, SSA, Apr. 7, 1987.

In 1975, the year of the Advisory Council report, replacement rates for ages 62 and 65 retirees were 59.5 percent for low earners, 42.3 percent for average earners, and 30.1 percent for maximum earners (see table 4.5). These rates generally continued their rise in the 1970s. In passing the 1977 legislation, the Congress decided that replacement rates would

be lowered 5-10 percent from their projected 1979 levels, which were somewhat higher than 1975 levels. During the period immediately after passage of the 1977 Amendments, however, economic conditions resulted in a continued rise in replacement rates that peak for those retirees still under the old law.

In table 4.5, the transition period is indicated for each age and the general pattern is for rates to decline for successive cohorts during the transition period.

Data for Age 62 Retirees

Replacement rates did not fall as markedly for lower earners as for higher earners. For average earners, the replacement rate for age 62 retirees actually rose for the 1979 transition cohort and was about the same for the 1980 cohort as for the 1978 pretransition cohort. The replacement rates for average and low earners showed a rather moderate decline toward the "desired" level thereafter. For age 62 retirees, the rate for low earners rose after the transition.[6] The rate for maximum earners, however, declined steadily during the transition period.

Data for Age 65 Retirees

For age 65 retirees, the transition provisions did not take effect until the 1982 cohort. In the time between passage of the Amendments and implementation of the transition provisions, replacement rates steadily rose for low and average earners but not consistently for maximum earners. The last cohort under the old formula (1981) had a 68.5- and 54.4-percent replacement rate for low and average earners respectively. The maximum earner rate was 33.4 percent—about the same as that for the 1977 cohort.

During the transition period, replacement rates generally fell for average and maximum earner, age 65 retirees. Similar to age 62 retirees, the decline was less dramatic for low earners than for high earners.

From a pretransition peak of 54.4 percent, the 1982 cohort of average earners received a 48.7-percent replacement rate and the 1983 cohort, a 45.8-percent rate. Subsequently, the rate declined to the "desired level" (about 42 percent) for the 1984 cohort and thereafter. In addition, the rates for the low and average earner 1982 and 1983 cohorts were higher than the rates prevailing when the 1977 Amendments were passed.

[6]It should be noted that much of the rise in replacement rates in the low earnings' category is a result of the minimum wage not rising after 1981.

Intended vs. Actual Replacement Rates

In discussions of the notch, the question arises as to whether any cohor received lower benefit levels or replacement rates than anticipated. One way to explore this matter is to consider what the Congress actually passed regarding the new formula and transition provisions and what this implied for replacement rates at the time. The replacement rates that could be expected from the 1977 Amendments, using the OASDI Annual Board of Trustees' Report assumptions at the time, are shown i table 4.6 for age 65 average earner retirees.

A replacement rate in the 46-47-percent range was expected for the last three age 65 retiree cohorts under the pre-1977 benefit formula. For the transition group, replacement rates were calculated to fall to the 41-42 percent range, even for the early transition cohorts. These data further suggest that, under the assumptions current at the time and given the actual provisions adopted, a fairly rapid transition could be expected.

Table 4.6: Intended and Actual Replacement Rates for Workers Retiring at Age 65, by Year of Retirement (1979-2000)

Year of retirement at age 65	(1) "Intended" replacement rate based on 1977 Amendments	(2) Actual and projected replacement rates based on current law	(2- Difference i percentage point
		actual	
1979	46.7%	48.1%	+1
1980	46.6	51.1	+4
1981	47.0	54.4	+7
1982	41.9	48.7	+6
1983	41.0	45.8	+4
1984	41.3	42.9	+1
1985	41.6	40.9	−0
1986	•	41.2	
		projected	
1987	•	41.0	
1988	•	41.4	
1989	•	42.3	
1990	41.8	43.2	
1995	41.8	42.8	
2000	41.8	42.0	

Source: "Intended" replacement rates obtained from Robertson, p. 23. For similar data on age 62, see Ferguson. Actual and projected rates are based on alternative II-B assumptions used in the 1987 Trustees' Report.

Note: Calculations are for average earners.

Table 6.1: Projected Status of OASI and DI Trust Funds, Combined, by Alternative (1986-91)

Figures in billions.

Calendar year/ alternative	Estimated status of OASI and DI Trust Funds, combined					
					Contingency fund	
	Income	Disbursements	Net increase in funds	Funds at end of year	Amount[a]	Ratio (percent)[b]
Actual:						
1986	$216.8	$201.5	$4.7	$46.9	$58.5	29
Projected:						
Alternative I (optimistic):						
1987	232.2	209.2	23.0	69.9	65.2	31
1988	265.8	220.5	45.4	115.2	92.1	42
1989	288.4	232.2	56.2	171.5	139.4	60
1990	317.6	245.4	72.2	243.7	197.8	81
1991	341.3	257.8	83.5	327.2	271.7	105
Alternative II-B (intermediate):						
1987	229.8	209.7	20.2	67.0	65.2	31
1988	259.4	222.6	36.8	103.9	88.7	40
1989	279.5	238.1	41.4	145.2	127.3	53
1990	309.4	255.1	54.4	199.6	170.8	67
1991	334.2	273.2	60.9	260.5	227.0	83
Alternative III (pessimistic):						
1987	225.0	210.4	14.6	61.5	65.2	31
1988	246.7	224.3	22.3	83.8	82.0	37
1989	266.0	242.9	23.1	106.9	106.4	44
1990	287.6	264.9	22.7	129.6	130.9	49
1991	310.5	286.9	23.6	153.2	155.3	54

Source: 1987 Annual Report of the Board of Trustees (Washington, D.C. OASDI, Mar. 31, 1987), p. 45, table 15.

[a]Represents assets at beginning of year, plus advance tax transfers for January.

[b]Represents assets at beginning of year, plus advance tax transfers, as a percentage of outgo during the year.

SSA provides estimates on the basis of optimistic (alternative I), intermediate (alternative II-B), and pessimistic (alternative III) assumptions about future economic and demographic conditions. While better-than-expected economic conditions are possible, the economy is well into the current period of economic recovery that began in December 1982. Thus,

in evaluating the effects of legislation, it is important in the current economic environment to supplement consideration of the intermediate projections by reviewing SSA's pessimistic projections.[2] These allow for the possibility of recession over the 5-year projection horizon.

The pessimistic projections imply lower wage growth relative to slightly higher inflation (slower real wage growth[3]), higher interest rates, and higher unemployment during 1987-90. Compared with alternative II-B, as table 6.1 shows, the pessimistic alternative III estimates lower income and higher disbursements for the trust funds. At the end of 1991, the trust fund balance would be $153.2 billion. In January 1991 under pessimistic assumptions, the trust fund ratio would be 54 percent. Such a level translates into about 6 months' disbursements, which is a relatively low short-run contingency level.

Long-Range Actuarial Status of the Trust Funds

An important measure of social security's long-range financial status is the 75-year actuarial balance. Actuarial balance is the relationship between the 75-year averages of annual expenditures and revenues (projected) as a percentage of taxable payroll, using the Board of Trustees' assumptions concerning future economic and demographic trends. When the cost rate (the average expenditure percentage) equals the income rate (the average revenue percentage) over 75 years, the system is considered to be in actuarial balance. When the cost rate exceeds the income rate, the system is in actuarial deficit, and the 75-year average difference represents the amount by which the payroll tax rate would have to be raised to bring the system into long-run actuarial balance. When the income rate exceeds the cost rate over the 75-year period, the system is considered to be in actuarial surplus. The system is considered in close actuarial balance when the 75-year income rate is within a range of 95 to 105 percent of the cost rate.

In March 1987, the Board of Trustees' projections (under the intermediate II-B assumptions) showed a small 75-year actuarial deficit for OASDI, −.62 percent of taxable payroll. The projected income rate (12.89) is just within 95 percent of the projected cost rate (13.51), which makes the system, although in deficit, within close actuarial balance.

[2]As of Mar. 1988, the economy was in the 63rd month of recovery. This is the second longest recovery in the postwar period. The average length of postwar recoveries is about 56 months.

[3]Real wage change is the difference between the percentage change in nominal covered wages and the percentage change in the price level (the CPI).

While replacement rates for the transition group clearly were put on a path toward a lower stabilized level, the rate of inflation in the latter 1970s increased. This continued to fuel the benefit increases for those still having benefits computed under the old law formula. As a result, replacement rates continued to increase for this group. Since higher inflation fuels wage growth, higher-than-expected benefits for those under the new wage-indexed formula resulted, as well as for those who had not yet reached age 62 but who eventually would receive benefits under the transitional guarantee. Actual replacement rates are in general higher than those expected at the time the Amendments were adopted, as table 4.6 shows. Furthermore, replacement rates for the first 3 years of the transition period were higher than anticipated—and declined more gradually to the intended levels than the rates projected using the 1977 assumptions.

Addressing the Notch Issue: Policy Aspects, Proposals, and Alternatives

Public discussion and Congressional consideration of the notch issue has continued since shortly after the 1977 Amendments and new benefit formula went into effect. Despite at least 9 years of debate, the issue remains unresolved. In addition to its technical complexity, there are various perceptions of the notch and who is affected by it. Also, there are concerns about implementing legislation and the effects this could have on the financial status of the social security system.

Early Consideration of the Notch: The HHS Position

Officials of the Department of Health and Human Services (HHS) testified concerning the notch issue in 1979.[1] The Department stated that, despite the apparent disparities in benefit amounts, the resulting benefit awards and replacement rates were the outcome of conscious decisions of the Congress. They recommended that the Congress not pass legislation aimed at alleviating the disparities. HHS officials did, however, discuss various options for addressing the notch issue:

1. Reduce the future benefits of those whose benefits are computed under the old law formula and who continue to work past age 62 by not including earnings for these years of work.

2. Increase the benefits of those whose benefits are computed under the new law (transition provisions) for those retiring in the first few years after the new law takes effect. This would reduce the differential by "equalizing up" benefits for those under the new law.

3. Employ a variation of (1) above. Those who turn 62 prior to 1979 would have their benefits computed under the old law but only including earnings up through 1978. Earnings after 1978 would be recomputed under a different provision and any increase resulting would be added to their old law benefit. Similarly, the transition retiree would get a benefit recomputation (to include post-age 61 earnings) figured under the new system and any increase would be added to the transition benefit.

While acknowledging that the effect of the 1977 legislation was to create the disparities in benefits, HHS noted that the proposed solutions would create significant problems in terms of both administrative implementation and cost to the system. For these reasons, HHS did not recommend proposal 2 above, to raise benefits for those under the new law. Proposal 1, to reduce benefits for those under the old law, would result

[1] House of Representatives, Hearings on Employer Payment of Social Security Taxes; Benefit Formula Differential.

in smaller benefit disparities but could mean some beneficiaries might not get a benefit increase for a number of years. The third option was a compromise: it would lower benefits for some under the old law and might raise benefits for some under the transition provisions. These two effects would largely offset each other in terms of cost to the system. HHS said this proposal would be difficult to implement, however, because of the considerable administrative complexity it would impose, requiring a large number of recomputations over many years.

The first and third options each would reduce the amount awarded in 1980 and subsequent years and involved recomputations using earnings in 1979 and subsequent years. Consequently, HHS noted that, if the Congress chose to make changes, the proposals should be enacted by December 31, 1979. HHS took the position, however, that the benefit disparities were not a "problem" but rather part of the solution enacted in the 1977 Amendments. During this period, no changes were enacted.

Robert J. Myers' Proposal

In subsequent discussion at the 1979 hearings, a variant of the HHS options was suggested by Robert J. Myers, former SSA Chief Actuary from 1947 to 1970.[2] His proposal applied to any retiree who reached age 62 before 1979—the pretransition group. Rather than continue use of the old benefit formula, the Myers proposal would apply to existing benefits a prospective increase based on how much the PIA, calculated under the new formula and including post-1978 earnings, increased compared with the PIA computed excluding post-1978 earnings. This meant that the benefit increases for those under the old formula (based on post-1978 earnings) would be based on the new law benefit formula (AIME method) and the amount those earnings would increase the new law benefit as opposed to the old law benefit.[3]

The major advantage of his proposal, Myers maintained, was that it would lessen the notch disparity by reducing only future benefit increases, not any benefit levels already received. The Myers proposal also would preserve the intent of the new benefit provisions—a desirable feature. Furthermore, unlike HHS's options, it did not have to be enacted in 1979. Implementation could be delayed for about a year, which also would have given the Congress more time to consider it.

[2]Myers, pp. 174-177.

[3]Myers' proposal would have made the delayed retirement credit equal to 3 percent for all persons and all periods after 1981, as opposed to current law, which was 1 percent for those attaining age 65 before 1982 and 3 percent for later attainments. See Myers, pp. 175-176.

Myers notes that enactment of his proposal by the middle of 1981 would have done much to alleviate the notch disparities, because it could have been applicable to 1980 earnings.

In March 1981, the National Commission on Social Security issued a comprehensive report making numerous recommendations concerning social security.[4] The Commission recommended that the Congress address the "notch problem." At about the same time, the newly elected Reagan Administration was making its early proposals on social security. Included in its package of proposals was the Myers' proposal to address the notch. However, in part because this package of proposals was, in general, not received favorably by the Congress, no changes regarding the notch were enacted during this time.[5]

The Notch Issue Almost Disappears

In the 1981-83 period, the social security system was a focus of congressional debate.[6] The declines in employment and earnings associated with economic recession in 1981-83 reduced revenues to the trust funds and worsened the system's short-run financing outlook. The short-run financing problems occurred in the context of a long-run actuarial deficit, which had not been completely addressed in the 1977 Amendments. President Reagan appointed another national commission, headed by economist Alan Greenspan, to devise a bipartisan solution to the system's financial difficulty. In this environment, the notch issue received little attention.[7] There may have been reluctance to address the issue because some of the options for addressing the notch carried substantial costs. Also, because the issue was not addressed before the end of 1981, the administrative difficulties in recomputing benefits became greater and potentially more costly.

The notch issue might have disappeared, since experts maintained that the time had passed for a feasible solution, and the Congress had just gone through the wrenching process of passing the 1983 Amendments to

[4]National Commission on Social Security, Social Security in America's Future, Washington, D.C., Mar. 1981, p. 323.

[5]Myers, p. 332.

[6]For one account of the events of this period, see Paul Light, Artful Work: The Politics of Social Security Reform (New York: Random House, 1985).

[7]Report of the National Commission on Social Security Reform, Jan. 1983. There is no apparent reference in this report to the notch situation nor any consideration of it.

avert a financial crisis.[8] In late 1983, however, a series of columns by the well-known newspaper feature writer Abigail Van Buren called attention once again to the matter.[9] The "Dear Abby" columns turned what was a complex technical issue, known to a relatively small number of experts, into an immediate concern of millions of benefit recipients. Subsequent to the "Dear Abby" column, several members of the Congress moved to renew the debate by introducing new legislation to address the notch issue. It was at this point that the development of the issue took a major turn and became one of greater controversy. Because the matter was highly technical, some of the information provided in the "Dear Abby" column was found to be misleading and likely created some mistaken impressions about the notch and who was affected by it.

"Dear Abby" and Other Views of the Notch

The original "Dear Abby" column asserted that those in the transition group (born 1917-21) were disadvantaged both relative to those born earlier and relative to those born later who were not in the transition group. As chapter 4 shows, those who received benefits under the new law/transition guarantee generally received lower benefits than those in the last few cohorts under the old law. However, it is not the case that those in the transition group always receive lower benefits than those who follow the transition group (those born after 1921), in part because the transition group has its benefit computed two ways—new law and transition guarantee—and receives the higher of the two benefits.

Another "Dear Abby" column implied that the new law arbitrarily discriminated against those born after 1916 and in favor of those born before 1917. While the existence of differences in benefits appears to support this contention, it is misleading to create the impression that those born after 1916 are discriminated against. The choice of a date for implementation of the new law may appear arbitrary, but there was

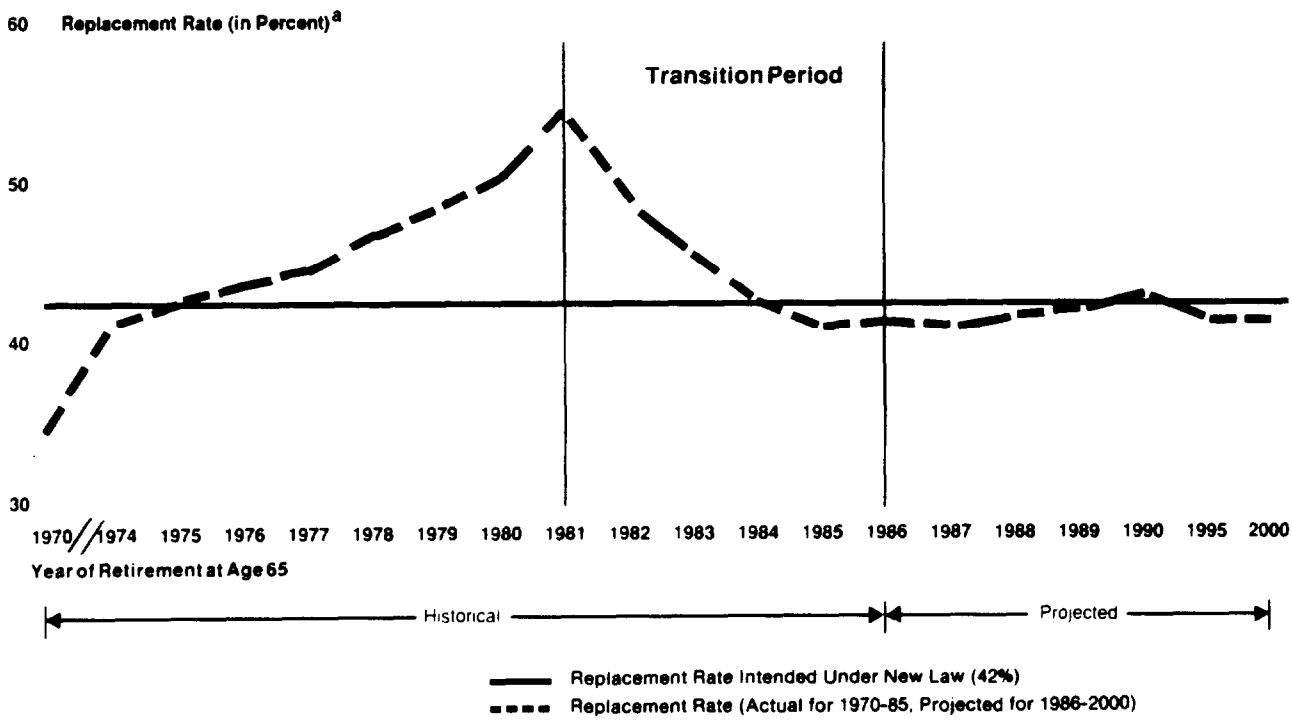
[8]Our review of bills introduced in the 97th Congress (1981-82) relating to social security did not find any that specifically concerned the notch, although elsewhere we found a reference to H.R. 5469 in the 97th Congress. The American Enterprise Institute study mentioned in ch. 3 notes that 21 bills and resolutions relating to the notch were introduced in the 98th Congress (1983-1984).

[9]The Washington Times Magazine, Sept. 5, 1983, p. 15D, also Nov. 14, 1983, p. 15D. See related materials compiled in an Information Package by the Congressional Research Service, Library of Congress, The Social Security Notch, IP0266S.

valid reasoning behind the choice of implementation date, as discussed in chapter 3.[10]

Moreover, the charge of discrimination against a particular group is misleading insofar as those in the transition group compare themselves to only the nearest cohorts that benefited (and benefited disproportionately) from the overindexed formula. Figure 5.1 illustrates this point from the data on replacement rates we presented in chapter 4. The "peak" replacement rates, for age 65 retirees occurred in the 1980-81 period. The replacement rates for the transition group decline steadily (and rapidly) to a stabilized level around the 42-43 percent intended by the 1977 legislation. Stable replacement rates are projected for those retirees under the new law benefit formula.

Figure 5.1: Replacement Rates for an Average Earner Retiring at Age 65, 1970-2000



[a]Based on 1987 Trustees' assumptions.

Source: Tables compiled by Orlo R. Nichols, Actuary, SSA, 1987.

[10]See discussion in ch. 3, ftn. 11. Also note that the impression developed that all individuals in the transition group received lower benefits than the benefit based on the old formula. As the discussion in ch. 3, ftn. 20 suggests, this is not true. Also, as ch. 4 shows, there is little difference in benefit amounts between the 1916 (old law) cohort and transition cohorts for those retiring at age 62.

If the transition group is compared with those coming before and after, we find again (as we did in ch. 4) that most in the transition group received a higher replacement rate than did many of those born earlier and later than the transition group. In fact, when compared with the "intended" replacement rate of the 1977 Amendments, those who received higher benefits in relation to earnings span the period of retirement at age 65 from 1974 to 1985 (i.e., those born 1909-20). It is perhaps more appropriate to describe the notch as really only a part of a larger "mountain" of higher-than-intended replacement rates. At the peak of the mountain are some who are in the pretransition group and some who are in the transition or notch group.

Another view is that the benefits of those in the transition group should be compared to what they would have received had the old benefit formula never been changed. There are references in the public debate to the notch (or more specifically the size of the notch) being determined by the difference between the new law/transitional guarantee benefits and the benefits individuals would have received had they come under the old law provisions. This definition goes beyond comparison with the benefits of the last pretransition cohort to suggest an "entitlement" to benefits under the old law. The major goal of the benefit formula revision was to correct a problem that resulted in some recipients being compensated at an unexpectedly high level. It seems incorrect to suggest that beneficiaries are entitled to a benefit based on an old formula that has been changed as well as to characterize such a comparison as the notch problem.

In summary, the effect of the "Dear Abby" columns was to trigger a broader, more political debate regarding the technical notch problem. The public exchanges served to inform millions of people about a problem that might affect their daily lives and incomes. At the same time, the attempt to simplify a highly technical issue created some mistaken and misleading impressions among affected individuals and some who thought that they were seriously affected. A "perception" issue arose—individuals felt that they were not being dealt with fairly. It has been noted that this could lead to diminished faith in the social security system.[11]

[11]For an identification of this problem see AEI, "Proposals...," pp. 20-21.

Legislative Attempts to Address the Notch Issue

Following the attempts of the early 1980s to address the notch issue, the renewed public interest in it generated increased attempts to legislate a solution. The AEI legislative analysis classifies legislative proposals as those that would

- raise benefits by lengthening the transition to the new system,
- restore the pre-1977 benefit rules, or
- study the notch issue.

None of the proposed legislation to deal with the notch issue has been enacted to date, and because of the large number of bills introduced over time, we will not attempt to discuss them all.[12] The major focus of attention in recent years has been H.R. 1917 (and its predecessor), introduced by Representative Edward Roybal, Chairman of the House Select Committee on Aging (with numerous cosponsors) in each of the last three Congresses. The form of H.R. 1917 has changed over time, from its introduction in the 98th Congress as H.R. 4093 to its current version in the 100th Congress, introduced April 2, 1987. The earlier versions proposed to extend the transition period to the new wage-indexed benefit formula as well as liberalize benefits computed under the transition formula but did not seek to completely restore the pre-1977 benefit computation rules. Major elements of the early version of H.R. 1917 were as follows:

- Lengthen the transition period by making the transitional guarantee available to those who attain age 62 after 1983 (the current cut-off for the transition group). Also, this provision would be restricted to those with at least 27 quarters of coverage before 1979.
- Allow earnings after the year of attaining age 61 to be used in the benefit computation. This provision would be restricted to include only 3 years of earnings after 1978 up to a maximum of $29,700 per year.
- Revise the transitional guarantee, specifically the 1978 frozen benefit table, to include benefit increases (COLAs) occurring after 1978.
- Limit the number of computation years to 25 under the transitional guarantee method rather than continue the increase under present law to 35 years for workers attaining age 62 in 1991 or later.
- Make changes retroactive, paid in a lump sum, and not applicable to dependents.

While not going so far as to restore completely the pre-1977 benefit rules, this proposal would have gone a long way toward such restoration

[12]For a review of earlier legislation, see AEI, "Proposals..."

while lengthening the transition period to perhaps 20-30 years. In moving back toward the earlier overindexed benefit formula and extending the transition to many benefit recipients not in the original transition, the bill essentially constituted a proposal for a general benefit increase for a large group of current and future benefit recipients.

The main criticism levied against the original version of H.R. 1917 was that it would be very costly to the Social Security Trust Funds. Over the past several years, SSA has made various estimates of the cost of the bill, ranging from $77.8 to $92.6 billion through 1990, including retroactive payments to beneficiaries. Most recently SSA, using a more recent beneficiary sample and improved estimation methods, projected the cost of the original version of H.R. 1917 to be $242.9 billion over the period 1987-95.[13]

Near the end of the 99th Congress (fall 1986), there was discussion of revising the bill, in large part aimed at reducing its cost. A 10-year transition period, similar to that proposed in the debate leading to the 1977 Amendments, was discussed. During the current 100th Congress, Representative Roybal and his cosponsors introduced a new version of H.R. 1917, whose key features are (1) a 10-year transition period and (2) computation of benefits under the pre-1977 formula, except that they are reduced by 3 percent plus an additional 3 percent for each year of birth after 1916. Thus, an individual born in 1917 would get the old law benefit less 6 percent, one born in 1918 would get 9 percent less, one born in 1919 12 percent less, and so on (see table 5.1).

Essentially, the bill prescribes an alternative transition formula that would be retroactive for the transition cohort. The formula is based on a computation of benefits under the old law, from which a fixed percentage would be deducted. The bill would require much lower disbursements compared to the more recent SSA estimate of the earlier H.R. 1917 introduced in the 99th Congress, but the cost would remain significant. SSA estimates the cost of this bill over the period 1987-96 at about $86.4 billion.[14]

[13]Cost estimates are contained in various memoranda prepared by SSA's Office of the Actuary. The revised estimate of the earlier version of H.R. 1917 is contained in a memorandum prepared by Roy A. Ferguson and John F. Dickstein, Actuaries, in SSA, "Estimated Short Range Financial Effects of Two Proposals to Increase Benefits for Certain Workers Who Attain Age 62 After 1978—Information," Mar. 11, 1987.

[14]Memorandum by Roy A. Ferguson, June 23, 1987.

Table 5.1: Reduction of Social Security Benefit Based on Pre-1977 Formula Proposed in H.R. 1917, 100th Congress

Year of birth	Percentage reduction in old law benefit
1917	6
1918	9
1919	12
1920	15
1921	18
1922	21
1923	24
1924	27
1925	30
1926	33

Other Legislation in the 100th Congress

A number of other bills and resolutions to address the notch disparity have been introduced in the 100th Congress.[15] One proposal of interest is contained in H.R. 1721 (previously introduced as H.R. 121) sponsored by Representative Hal Daub. Like H.R. 1917, this bill proposes an alternative transition formula. However, it differs from H.R. 1917 in important respects. First, the transition period is not extended beyond the original 5-year period. Second, the actual transition formula proposed is based on the new law formula plus a declining percentage of the difference between the benefit computed under the old law (including 3 more years of earnings after the year of attaining age 61) and the benefit under the new law. The formula, which could be called a "blended" formula, is shown in table 5.2.

[15]As of Mar. 1988, our review shows at least 3 resolutions and 17 bills introduced in the 100th Congress. See app. IV and V for a listing as well as the cost of several bills as estimated by SSA. Among the various measures for addressing the notch issue, the AEI study (pp. 16-18) mentions several that either have not been introduced in legislation or only in relation to other provisions. Among these measures are:

- Count earnings after the year of attaining age 61 in the transitional guarantee computation.
- Count certain benefit increases that would be currently excluded in the transitional guarantee computation.
- Freeze social security benefits (or COLAs) for certain recipients who reaped the largest windfalls.
- Refund a portion of social security taxes to those who were unable to count earnings after the year of attaining age 61 in the transitional guarantee.

Table 5.2: Transitional Benefit Formula Under H.R. 121/1721

Worker reaching age 62 in	Would be guaranteed a PIA of no less than
1979	New law PIA + 60% (modified old law PIA - AIME PIA)
1980	New law PIA + 35% (modified old law PIA - AIME PIA)
1981	New law PIA + 30% (modified old law PIA - AIME PIA)
1982	New law PIA + 25% (modified old law PIA - AIME PIA)
1983	New law PIA + 10% (modified old law PIA - AIME PIA)

Essentially, the formula would give transition retirees the new law benefit plus an additional amount related to the old formula with the percentage declining through each year of the transition period. The bill is estimated by SSA to cost $24.3 billion from 1988-96.

Another proposal for addressing the notch in the 100th Congress is contained in S.1830, introduced by Senator Terry Sanford in November 1987. The same proposal was introduced in a House bill, H.R. 3788, by Representative Harold Ford in December 1987. The Sanford/Ford bills' major provisions are:

- Extend the transition period an additional 8 years. While the current transition period covers those born 1917-21, this proposal would include in the transition group those born 1917-29.
- Compute benefits for the transition group three ways: through the wage-indexed formula, the current law transitional guarantee, and a new transition provision. Beneficiaries would receive the highest of the three computed benefits.
- Base the new transition provision on pre-1977 law. It would include all COLAs, but limit maximum annual creditable earnings after 1981 to $29,700 and exclude earnings in years after the year the worker reaches age 65. A factor then would be applied to the modified old law benefit, reducing it by 5 percent, plus 2 percent for each year of birth after 1916. The factor also would be reduced by one-twelfth of 1 percent for each month that entitlement was delayed after age 62 and before the month of attaining age 65.
- Make benefits retroactive but limited to a total of $1,000 per family.
- Do not use, for workers born before 1917, earnings for years after attaining age 70 to compute or recompute benefits for January 1986 or later, although existing benefits would not be reduced.

SSA estimates the 10-year cost of the Sanford/Ford bill to be $67.5 billion. This cost is higher than the cost of the H.R. 121/1721 and closer to, but lower than, the cost of H.R. 1917.

Effects of Proposed Legislation on Social Security's Financial Status

The potentially significant cost of legislative proposals addressing the notch issue has been a major deterrent to their passage. This does not mean that cost should be the primary factor in determining whether a legislative "solution" is warranted. However, assuming that a solution is warranted, the cost and method of financing become an integral part of determining feasibility. Much consideration has been given to how proposed legislation and other solutions would affect social security's finances in both the short and long run. Several little-recognized concerns related to the method of financing notch solutions are who really "pays" for them and who benefits. These concerns are the focus of this and the next chapter.

Current Status of the Trust Funds

Since implementation of the 1983 Amendments to the Social Security Act, the financial status of the OASDI Trust Funds is much improved. Underlying this improvement have been positive economic conditions. Wage growth has been moderate, while inflation has been low relative to current wage growth and the inflation rates of the 1970s and early 1980s. National income has grown through this period, as has aggregate employment. As a result, the short-run status of the trust funds has steadily improved, to some degree more than expected. Under SSA's intermediate economic assumptions (alternative II-B), at the end of 1986 the funds totaled $46.9 billion and at the beginning of 1987 (including advance transfers to pay January benefits), the funds were at $65.2 billion (see table 6.1). The contingency trust fund ratio[1] in January 1987 was 31 percent; i.e., the balance in the funds could cover about 4 months' disbursements. Given the economic and demographic assumptions and legislated payroll tax increases in 1988 and 1990, the funds are projected to increase in the future. During the current 5-year horizon of the short-range estimates, the funds will grow substantially, reaching a projected balance of $260.5 billion at the end of 1991. In January 1991, a contingency fund ratio of 83 percent, close to what can be considered an adequate contingency level, is expected.

[1]The measure known as the trust fund ratio relates the balance in the relevant trust fund (usually as of the beginning of the year) to the projected annual disbursements from that trust fund. It measures the percentage of assets on hand to cover expected annual disbursements. It is also expressed in number of months and is used as a measure of the system's short-run condition.

Assuming no change in current law, two important factors will determine whether the system maintains close actuarial balance in the near future:

1. Changes in the underlying economic and demographic assumptions that are less favorable, would result in a larger actuarial deficit.

2. Projected demographic conditions could cause a tendency toward larger actuarial deficits over time.

From now until around the year 2015, projected demographic conditions are favorable to the system and would tend to result in years when the income rate exceeds the cost rate. But as the year 2015 approaches, the "Baby Boom" generation will be retiring. This will result in generally unfavorable demographic conditions for the system, making each year after about 2020 one of actuarial deficit. Thus, for each future year, the 75-year projection period will "lose" a year of actuarial surplus and "add" a future year of actuarial deficit. Other things being equal, the 75-year projections, tending toward larger actuarial deficits over time, could very shortly show the system out of close actuarial balance.

Effect of Notch Legislation on the Trust Funds

The cost of legislation relating to the notch issue and its effect on the trust funds depends, of course, on the final form of any legislation. Two bills that we reviewed, H.R. 1917 and Representative Daub's bill, H.R. 121/1721, would result in increased benefits, associated administrative costs, and foregone interest to the trust funds according to SSA estimates (see table 6.2). The effect on the trust funds is a primary consideration, as no proposed bills provide for financing notch legislation other than by using current and projected revenues to the trust funds.

If enacted, these two bills could have a sizable impact on the trust fund balances. Over the 10-year period 1987-96, H.R. 1917 would cost the trust funds $86.4 billion and H.R. 121/1721, $24.3 billion, the estimates show. As notch legislation would increase expenditures from the trust funds, it would result in lower trust fund ratios. The alternative II-B estimates in table 6.2 show that, under present law, the OASDI funds would achieve a trust fund ratio of 100 percent or 1 year's reserve by 1992 and reach 169 percent of annual disbursements or about 20 months' reserve by 1996.

Table 6.2: Effect of Proposed Notch Legislation on the OASDI Trust Funds (1987-1995)

Figures (except trust fund ratio) in billions of dollars; based on SSA estimates and alternative II-B economic assumptions

	Projected status of OASDI Trust Funds (no notch legislation)					
Calendar year	Excluding interest	Interest income	Total	Outgo	Balance, end of year	Trust fund ratio (percent)[a]
1986	•	•	$216.8	$201 5	$46.9	29
1987	$224.6	$5.2	229.8	209.7	67.0	31
1988	252.2	7.3	259.4	222 6	103 9	40
1989	269.1	10.3	279.5	238.1	145.2	53
1990	295.3	14.2	309.4	255.1	199.6	67
1991	315.6	18.6	334.2	273.2	260 5	83
1992	337 5	23.2	360.7	291 1	330.2	100
1993	359.7	28.0	387.6	309.5	408.4	117
1994	382.8	33.0	415.7	328.9	495.2	134
1995	407.0	38.4	445.4	349.4	591.2	152
1996	433.2	44.1	477.3	371.1	697 3	169

	Projected status of OASDI Trust Funds (notch legislation)							
	H.R. 1917				H.R. 121/1721			
	Cost	Outgo	Balance, end of year	Trust fund ratio (percent)[a]	Cost	Outgo	Balance, end of year	Trust fund ratio (percent)[a]
1987	$15.5	$225.2	$51.6	29	•	$209.7	$67.0	31
1988	5.6	228.3	81.3	32	$2.2	224.9	101.5	39
1989	6.5	244.6	114.1	43	2.6	240.7	140.0	52
1990	7.3	262.4	158.5	53	2.7	257.8	191.2	64
1991	7.9	281.1	208.1	66	2.8	275.9	248.7	79
1992	8.3	299.4	265.1	79	2.8	293.8	314.7	95
1993	8.5	318.0	329.6	93	2.8	312.2	388.9	111
1994	8.7	337.6	401.7	107	2.8	331.6	471.6	127
1995	8.9	358.3	481.9	122	2.8	352.0	563.2	144
1996	9.0	380.1	571.2	137	2.8	373.7	664.7	161
Total cost, 1987-96	**$86.4**				**$24.3**			

[a]Assets at beginning of year as a percentage of outgo during year.

While there is no official definition of an adequate contingency level for the trust funds, a trust fund ratio of 100 percent (or 1 year's reserve) generally is considered adequate. A study by Munnell and Blais notes that a trust fund reserve ratio of between 85 and 145 percent is sufficient to weather a period of poor economic conditions similar to those

experienced in 1973-80.[4] Under this definition, the funds do not exceed the upper boundary of this range until 1995 under alternative II-B assumptions. The cost of H.R. 1917 prevents the funds from exceeding the Munnell-Blais contingency reserve range during the 10-year projection horizon, as table 6.2 shows. H.R. 121/1721, while also costly, would have a much less serious impact on the funds and the trust fund ratio. In 1996, H.R. 121/1721 would produce a trust fund ratio of 161 compared with 169 under current projections, it is estimated.

While the cost of notch legislation may not appear as significant in relation to the large projected trust fund balances, it should be recognized that over the next 10 years the funds are projected to attain only minimum contingency reserve levels. At that time, the funds would only reach the point at which the much-discussed "surplus" reserves would begin to accumulate. Therefore, notch legislation would slow the system's attainment of minimum contingency reserve levels. More importantly, notch legislation could put the system at additional risk should the economy experience a downturn.

In terms of long-run actuarial status, additional costs arising from notch legislation (without alternative financing mechanisms) would worsen the system's actuarial balance. If additional costs are averaged into the cost rate over 75 years, they might increase it by a small fraction of a percentage point of taxable payroll, depending of course on the form of the legislative proposal.[5] However, this would mean future tax increases might have to be considered sooner than would be the case in the absence of notch legislation. Furthermore, if future tax increases to fund increased benefits resulting from notch legislation were spread over a shorter period than 75 years, it follows that such increases would be greater than those shown employing 75-year projections.

Who Should Pay to Correct the Notch?

Some proposals for dealing with the notch issue suggest that those in the group immediately preceding the transition and who benefited from overindexing should share in the cost of notch legislation. While this approach has merit on technical and equity grounds, it would require the Congress to reconsider its decision not to have then-current retirees

[4]Alicia Munnell and Lynn Blais, "Do We Want Large Social Security Surpluses?" New England Economic Review, Sept./Oct. 1984, pp. 5-21.

[5]SSA estimates of the additional cost as a percentage of taxable payroll of the notch legislation discussed in ch. 5 are: H.R. 121/1721 (Daub), .02; H.R. 1917 (Roybal), .08; and S.1830/H.R. 3788 (Sanford/Ford), .07.

or those very close to retirement affected by a change in the benefit formula. Also, this alternative was more feasible during the earlier debate on the notch issue. As mortality renders the pretransition group smaller over time, there is a smaller base from which to acquire the necessary financing without having a significant impact on individuals.

Also, there are other questions. For example, if notch group benefits were raised retroactively should reductions in pretransition group benefits be retroactive as well? How feasible is it to collect "overpayments" from the pretransition group? Furthermore, retroactivity raises possible problems because of the necessary additional computations that SSA might have to make. How would a specific pretransition group be defined? These are a few of the practical considerations that would have to be addressed in implementing legislation of this type.[6]

Another alternative for financing notch legislation is to raise payroll taxes. This adds another dimension to the debate concerning who should pay if notch legislation is warranted. Social security can be largely characterized by a current-cost ("pay as you go") concept; current workers pay taxes to finance the benefits of current retirees. A worker's taxes are not held in reserve for that worker's retirement. The current-cost concept underlies the role of the OASDI Trust Funds as a contingency reserve, although the system has not operated as such historically and may not in the future.

With the overindexed pre-1977 formula, then-current workers contributed to pay higher-than-anticipated benefits to retirees. Some of these individuals would retire later during the transition period. With the corrected 1977 formula, current workers then paid more appropriate benefits to transition group retirees. Thus, it is not inconsistent for some in the transition group to argue that they paid higher taxes during part of their working years and received lower benefits after retirement. In this context, what the transition group is essentially asking is for current workers to contribute to paying benefits more comparable to those received by the pretransition group. Because of the need to correct the benefit formula in the context of a current-cost system, there must be some group willing, or required, to accept a slight lowering of benefits

[6]Although such "implementation issues" were not a direct focus of our study, SSA officials indicate that notch legislation could have a significant effect on their operations, depending on the form of legislation. For instance, the number of recomputations needed to provide additional benefits under notch legislation could exceed the capacity of the existing computerized system, thus requiring benefits to be calculated by hand. Also, GAO recently reviewed a number of aspects of SSA's operations in light of a planned reduction of 17,000 staff over 5 years. Such matters could warrant further review should notch legislation be adopted.

relative to taxes paid. Whatever the merit of various notch legislation, most of the major proposals attempt to shift the burden of paying to "correct" the benefit formula off into the future.

The financing of notch legislation becomes even more complicated because of the long-term financing strategies adopted in the 1977 and 1983 Amendments. These amendments attempted to correct the long-run financing of social security by addressing the effects of adverse demographic conditions expected to occur when the Baby Boom generation retires in the early part of the 21st century. The solution was to adopt provisions aimed at the accumulation of higher trust fund balances in the nearer term that could lessen the need to increase future tax rates for future workers to pay for the Baby Boom's retirement. The higher balances are to be accumulated through the current Baby Boom generation paying higher taxes than would be necessary under strictly current-cost financing.

But this means that current workers, who already are paying higher taxes than necessary to partially fund future benefits also would be required to pay higher taxes to finance higher benefits for the notch group. Such an imposition of additional taxes on current workers can be viewed as inequitable.

Furthermore, to use accumulating reserves to compensate the notch group brings us again to the position of shifting costs to future workers in the form of higher taxes to finance the benefits of the Baby Boom.

In essence, a resolution of the notch issue is caught between the Congress's past decisions not to penalize those who benefited from the over-indexed formula and to have current workers pay higher taxes to finance a portion of their future benefits and mitigate an otherwise more severe potential payroll tax burden on future workers. In considering the financial implications of legislation to address the notch issue, the Congress will have to reassess some of its past decisions.[7]

[7]For another discussion of the policy problem of the notch, see Robert M. Ball and Robert J. Myers, "Notch-Babies and Bonanza-Babies, A $300 Billion Misunderstanding," reprinted in The Congressional Record, May 6, 1987, pp. H3246-47.

Who Would Benefit From Notch Legislation? Socioeconomic Data Relating to the Notch Group

In requesting a comprehensive study of the notch issue, the Chairman of the Subcommittee on Social Security, House Committee on Ways and Means asked us to compile socioeconomic information relating to the notch group.[1] In our analysis, we sought to relate the characteristics of those affected by the notch to the degree to which they may be affected by the disparity in benefits. Such an analysis focuses on how the pattern of notch disparity compares with the pattern of benefit recipients' income, assets, and health status. For example, are those with larger disparities likely to have smaller or larger incomes, hold more or fewer assets, and have better or poorer health? As agreed with the Chairman's office, we reviewed several sources of data on the social security recipient population and selected SSA's New Beneficiary Survey (NBS) as containing the most complete information of the type requested.

Of the beneficiaries affected by the notch, those likely to have larger disparities attributable to it tend to have higher incomes, greater asset holdings, and fewer health problems than those likely to have only small notch disparities. We caution that our analysis deals with general patterns in the data; many individuals do not fit these patterns.

SSA's New Beneficiary Survey

The NBS, conducted by SSA in 1982, is based on a sample of those who first received social security benefits during the period mid-1980 to mid-1981. It is a nationally representative survey of households, randomly selected from SSA's Master Beneficiary Record and encompassing representative samples of major beneficiary categories. After interviewing beneficiaries from October through December 1982, SSA linked their responses to administrative data on benefit status. Separate samples were collected from men and women, ages 62, 63-64, 65, 66, and older. Information compiled in the NBS covers the following general categories:

1. Household composition,

2. Employment history/job characteristics,

3. Health status,

4. Sources and amounts of current income,

5. Asset holdings and asset income,

[1] For the Chairman's request letter, see app. I and for background information on our data analysis effort, app. II.

6. Marital history and information on respondents' spouses, and

7. Primary insurance amounts and monthly benefit amounts (MBA).

Using the NBS Data to Examine the Notch Group

While the NBS is quite useful for its information on beneficiaries and socioeconomic variables, it is a single survey. Unlike a longitudinal survey, the NBS has data for only individuals first receiving benefits in the period mid-1980 to mid-1981.[2] Furthermore, the notch is associated with the transition group, i.e., those born in the years 1917-21 who first became eligible for benefits during the years 1979-83. Thus, the NBS sample essentially cuts through the transition group, which prevents us from obtaining a complete cross section of the transition group.[3]

While the NBS has excellent data from beneficiary records, further complications arise in defining the notch disparity. There are different ways to view this, as we indicate in chapter 4.[4]

[2]In this chapter, we group data by "retirement age" although the more technically correct term in the NBS is "age at first benefit receipt." We use "retirement age" for convenience although we recognize that retirement is a broader concept encompassing more factors and conditions than receipt of social security benefits.

[3]The NBS includes what we might call "early notchers," those retiring at ages 62-64. Conversely, the NBS includes some retirees not in the transition group, "late retiring pre-notchers," born in 1916 and earlier and retiring in the period mid-1980 to mid-1981. Some of these individuals may be age 63 at retirement (if born in late 1916), some will be 64 (those born in late 1916), some will be 64 (those born in early 1916 and late 1915), some will be 65 (those born in early 1915 and late 1914), and the rest will be late retirees 66 and older. These "pre-notch" individuals receive benefits under the pre-1977 formula.

[4]Among the different ways to view or define the benefit disparities are to compare

1.closely adjacent 1916 and 1917 birth year retirees,

2. current-dollar initial benefit awards between cohorts with reference to the 1916 birth year cohort,

3. constant-dollar benefit awards,

4. replacement rates,

5. benefits under the transitional guarantee/new law formula with the (hypothetical) benefit that would have been received by individuals had the old law continued in effect.

Given the limitations of the data sources, we chose not to pursue the analysis using all of these definitions. The first definition above represents the clearest statement of the technical notch problem and is the one upon which our analysis focuses.

Structure of the Analysis

In compiling data on the notch group, we focused on the notch as a disparity in benefit awards between adjacent birth cohorts (i.e., 1916 and 1917). Hypothetical but typical steady earner cases showed a clear pattern in terms of retirement age (i.e., first benefit receipt) and benefit or PIA level. The later the age at which a transition group (i.e., 1917) individual retires, the greater tends to be the nominal dollar disparity in benefits compared with a closely adjacent old law (i.e., 1916) retiree (see table 7.1). Also, the higher an individual's lifetime covered earnings and hence his/her PIA level, the higher tends to be the nominal dollar disparity compared to the old law retiree. Table 7.1 shows the distribution of notch disparity (in percentage terms and dollar amounts) by retirement age and earnings/PIA category based on data presented in chapter 4. Across earnings' categories, the disparities display the following patterns.

- Age 62—1-2 percent
- Age 63/64—5-10 percent
- Age 65—11-14 percent
- Age 66—12-17 percent

Thus, grouping individuals by retirement age and PIA level allows us to broadly classify those likely to experience a higher nominal dollar disparity. Our basic approach, then, was to compare in a general way the pattern of notch disparity represented in table 7.1 with patterns in various socioeconomic variables to learn how individuals' likely disparities vary in relation to their income, assets, and health status. To the extent that notch legislation reduces the disparities proportionally, the analysis provides information about the characteristics of those likely to benefit most from notch legislation.[5]

[5]Given the lack of a complete cross section of transition group individuals in the NBS, we employed a simplifying assumption that permitted us to use the NBS data to draw some inferences regarding the notch group. We assumed that those retiring at a given age and earnings/PIA level but in closely adjacent years are unlikely to have significant differences in their overall socioeconomic profile. In other words, in the aggregate a cohort retiring at, for example, age 65 in a given year is not likely to differ significantly in terms of income and other aspects compared with an age 65 cohort retiring a few years earlier. This assumption permitted us to use a single survey such as the NBS and apply our observations to the notch group. It is as if we took the cross section available in the NBS and assumed that the profile of this group was essentially similar to the transition group. Such an assumption is consistent with a common characterization of the notch problem: "How can two individuals who do not differ in age at retirement and in lifetime earnings except that they were born in different years, receive significantly different social security benefit amounts?" Using this assumption and NBS data, our analysis groups individuals by age of retirement and PIA level. We then examine how socioeconomic variables vary by these categories.

Table 7.1: Differences in Benefit Awards Between 1917 and 1916 Cohorts

	Differences in monthly benefits,[a] for typical earner cases					
	Low earner		Average earner		Maximum earner	
Retirement age	$	%	$	%	$	%
62	$−3	−1.4	$−6	−1.9	$−7	−1.8
63	−12	−4.7	−24	−6.2	−30	−6.1
64	−26	−8.0	−51	−10.2	−66	−10.4
65	−45	−11.3	−88	−14.1	−111	−14.1
66	−57	−12.7	−124	−17.3	−146	−16.2

[a]Based on data presented in ch. 4.

The NBS sample contains over 18,000 respondents, including male and female retired workers, disabled workers, and those receiving dependent and Medicare benefits. Retired workers are grouped into categories by age of retirement: 62, 63-64, 65, and 66 and over.

To study patterns in variables in relation to the notch disparity, we selected a subgroup of 5,307 male retired workers, age 62 and over. Using information on the distribution of PIAs (benefits), we divided the male retired worker subsample into four monthly PIA categories: low, low/middle, high/middle, and high (see table 7.2 for their distribution).[6, 7]

Within each age category, we sorted the sample by PIA categories (see table 7.3). The mean PIA generally was higher for later-age retirees. Translated into annual amounts, these PIAs represented social security income of about $3,350 on average for an individual in the lowest PIA/age 62 category, and just over $10,000 on average for the highest PIA/66 and over category. To get a more complete view of the economic status

[6]The PIA variable represents the PIA for the end of the third part of the survey representing Jan.-Dec. 1982. We divided the PIA categories using the quartiles of the PIA distribution for each age group. Thus, the low/middle and high/middle PIA categories are divided at the median, while the low PIA category represents the 25th percentile and the high PIA category, the 75th and above percentile. It is useful to make four categories, as the lowest PIA category is likely to include a fair percentage of those who lack many years of covered earnings, perhaps because they were not working in covered employment for most of their careers even though their earnings were not low over their careers.

[7]The distribution of NBS respondents by retirement age (age at first benefit receipt) in table 7.2 is unweighted. This accounts for the fact that the distribution by age is fairly uniform. If NBS weights were applied to represent the universe of new beneficiaries, the distribution would be different. For example, about 48 percent of men would be in the 62-year-old category and men 66 and older would represent only 9 percent of new beneficiaries.

Also, the PIA distribution can be considered a proxy for the extent of notch disparity, as can retirement age. Thus, the joint distribution provides a slightly better framework for representing dollar disparities than either PIA or retirement age alone.

of the elderly, however, we needed to look at other aspects of income as well.

Table 7.2: Distribution of NBS Male Retired Workers, by Retirement Age and PIA

Characteristic	Distribution (percent)
Age at retirement:	
62	27.2
63-64	27.6
65	26.2
66+	19.0
PIA category:	
Low	25.1
Low/middle	24.9
High/middle	26.5
High	23.6

Table 7.3: Monthly Primary Insurance Amount for Male Retired Workers, by PIA and Retirement Age (In 1982)

	Mean monthly PIA, by PIA category[a]			
Retirement age[a]	Low	Low/middle	High/middle	High
62	$279	$496	$610	$669
63-64	369	601	706	770
65	425	707	776	809
66+	369	737	800	837

Source: NBS

n = 5,307

[a]Arrows show increasing notch disparity

Income Levels

The NBS produced extensive data, presented on a quarterly basis, on the sources of income of new recipients. The summary income variables we chose, which include the income of the spouse, represent a measure of household income. Household income is important in determining economic status, and, out of 5307 NBS male respondents retiring at age 62 and older, 4,483 or 85 percent were married. Thus, we restricted our analysis to married males (and their wives). The income variables we reviewed and discuss are: total income, total retirement income, total pension income (other than social security), and asset income.

Total Income

Data on the mean total quarterly income of the married male retired worker subsample (representing income levels in 1982) appear in table

7.4. Figure 7.1 shows the distribution of the subsample by income category. Included in total income are social security and pension benefits from public and private sources, earnings, asset income, government program and welfare benefits including SSI, and income from various other sources.[8]

Table 7.4: Quarterly Income of Married Male Retired Workers Age 62 and Over, by PIA and Retirement Age (In 1982)

	Mean quarterly income, by PIA category[a]			
Retirement age[a]	Low	Low/middle	High/middle	High
62	$3,951	$4,347	$4,925	$5,775
63-64	4,704	5,286	5,761	6,066
65	5,254	5,849	6,246	7,403
66+	5,237	7,379	9,171	10,447

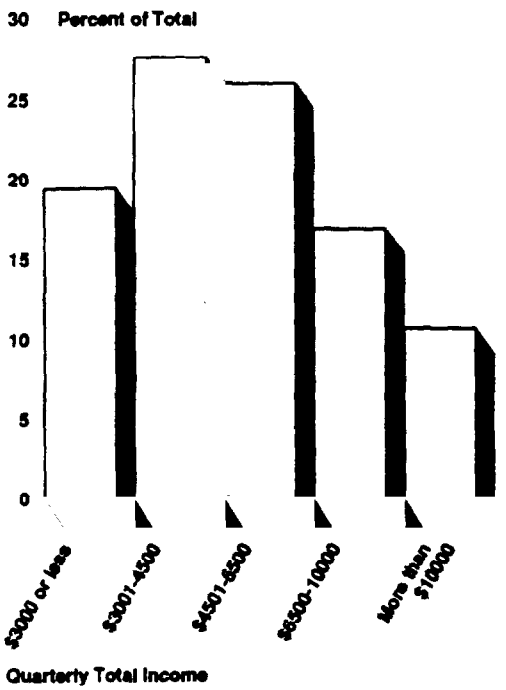
Source: NBS

n = 4,483

[a]Arrows show increasing notch disparity.

[8]One potential concern in using the NBS to study the notch group is that, as discussed in ftn 3, the NBS sample included some individuals who had benefits computed under the old law and some who used the transition/new law formula. This may affect the income data discussed here to the extent that those under the new law receive relatively lower benefits. In other words, the differences between high and low income might be somewhat wider than if we had a complete cross section of only those under the old law or only those in the transition group. Those who are in the NBS and in the transition group will be those who retire "earlier" (i.e., before age 65). This group tends to have smaller notch disparities than those who retire at later ages, which mitigates the impact on income resulting from this characteristic of the NBS.

Figure 7.1: Distribution of Quarterly Total Income for Married Male Retired Workers in New Beneficiary Survey



Total quarterly income averaged $3,951 for beneficiaries who retired at 62 and were in the lowest earning category and $4,347 for those in the next quartile of the age 62/PIA distribution. Mean total quarterly income was highest for those who retired at later ages (66 and over) and were high lifetime earners. For this group, those in the top two PIA categories averaged (respectively) $9,171 and $10,447 in quarterly income. Assuming the quarterly income continued at the same level in the other quarters of the year, those in the age 62/low middle PIA category would have had an annual income of over $17,000 and those in the age 66 and over/high middle PIA group, almost $37,000. For the age 65 group, mean income of around $6,000 implies an annual income of about $24,000.

Even for the earlier retirees, in the lower PIA categories of this subsample, average incomes were well above the Census Bureau's poverty line. In 1982 (the year relevant to the NBS data), the poverty level for a couple with an aged head of household was $5,836 in annual income. In our subsample, an age 62/low middle PIA retiree had a higher implied annual income—over $17,000. We caution that, with each age/PIA group, there can be substantial variation in incomes, and average

income is not as high for those not married or disabled. Thus, these data do not mean that all retirees are financially comfortable.

However, our main concern was with the patterns of variables in relation to the likely pattern of notch disparity. Mean income is higher for those with higher PIAs, the data show—not a surprising result. Also, those who retired later tended to have higher mean incomes. This was likely associated with more years of work, perhaps at high wage levels. Beneficiaries likely to experience large benefit disparities (in dollar amounts and percentages) associated with the notch also were likely to have higher average incomes. Again, this does not mean that the notch had no impact on those individuals or that no individuals in the later retiree category had their standard of living affected by the disparity.

Components of Total Income

Data for other portions of total quarterly income appear in tables 7.5 through 7.7. These include retirement income, pension income other than social security, and asset income. Total retirement income, which excludes earnings, represents a measure of the "long-term" income the elderly have if not working. In the early retiree/low PIA categories, quarterly incomes were in the $3-4,000 range or approximated annually at about $12-16,000.

When earnings are excluded, those experiencing the biggest difference were the later retirees, except for the lowest PIA categories. Thus, late retirees tended to be getting a substantial portion of their income from earnings. Again, when compared with the pattern of notch disparity this concept of income showed the same pattern as did total income.

Private and other public pensions were important sources of retirement income for many (see table 7.6). Those in the low PIA category had rather high percentages of retirement income coming from pensions other than social security. This reflects the high frequency of those receiving some type of public pension (such as federal, state, or local government) who lack extensive social security coverage. This was one reason for defining four rather than three typical earner categories.

Table 7.5: Quarterly Retirement Income of Married Male Retired Workers, by PIA and Retirement Age (In 1982)

	Mean quarterly retirement income, by PIA category[a]			
Retirement age[a]	Low	Low/middle	High/middle	High
62	$3,031	$2,967	$4,023	$4,897
63-64	3,236	3,497	4,767	4,910
65	3,856	3,827	4,892	6,472
66+	4,241	4,853	5,900	7,558

Source: NBS

n = 4,483

[a]Arrows show increasing notch disparity.

Table 7.6: Quarterly Pension Income Other Than Social Security of Married Male Retired Workers, by PIA and Retirement Age (In 1982)

	Mean quarterly pension income (non-SS), by PIA category (percent of total retirement income)[a]			
Retirement age[a]	Low	Low/middle	High/middle	High
62	$1,345 (44.4)	$805 (27.1)	$1,141 (28.4)	$1,548 (31.6)
63-64	1,097 (33.9)	471 (13.5)	1,047 (22.0)	923 (18.8)
65	1,294 (33.6)	625 (16.3)	886 (18.1)	1,585 (24.5)
66+	1,786 (42.1)	639 (13.2)	631 (10.7)	1,066 (14.1)

Source: NBS

n = 4,483

[a]Arrows show increasing notch disparity.

It is useful to review the data on the other three categories, which were more representative of individuals who receive most of their retirement income from social security.[9] Among these categories, pension income represented 11-32 percent of total retirement income. Later retiring/high PIA individuals tended to receive a smaller percentage of total retirement income from pensions and those retiring at age 62, higher portions from pensions.

These pension data do not display the strong association with the notch disparity that we found for total income, but some patterns are interesting. As age 62 retirees received a relatively high percentage of retirement income from other pensions, perhaps they retired earlier because of this additional income source. Those who retired after 65 tended to average relatively lower amounts of income from pensions; thus social security, earnings, and asset income were more important retirement income sources. For those age 65 in the highest PIA category, pensions represented about one-fourth of retirement income.

The pattern of asset income across the joint retirement age/PIA distribution corresponds to the pattern found with total income (see table 7.7). Those likely to have higher notch disparities tend to have higher asset income both in absolute terms and as a share of retirement income. Income from assets includes income from financial and real property assets and other sources such as trusts, royalties, and IRA/Keogh accounts.

The mean quarterly asset income ranged from $679 for age 62/lowest PIA retirees to $3,306 for age 66 and over/highest PIA retirees. Asset income represented a substantial and relatively constant portion of total retirement income, ranging between 19 to 30 percent for age 62 through 65 retirees. For age 66 and over retirees in all but the lowest PIA category, asset income represented over 30 percent of total retirement income and, for the highest earners, almost 44 percent.

Asset Holdings

The asset income variable discussed above measures the flow of income from individual asset holdings. We also reviewed data on asset holdings, an important dimension of the economic status of the elderly. The pattern of holdings also is compared to the pattern of notch disparity. Almost all of those in the NBS married male subsample had some assets, mostly in the form of savings accounts and home equity. A significant

[9]Although there can be many in the lowest category who received only social security benefits.

but much lesser proportion had such financial assets as money market accounts, certificates of deposit, stocks, and bonds.

Table 7.7: Quarterly Asset Income of Married Male Retired Workers, by PIA and Retirement Age (In 1982)

	Mean quarterly asset income, by PIA category (percent of total retirement income)[a]			
Retirement age[a]	Low	Low/middle	High/middle	High
62	$679 (22.4)	$572 (19.3)	$962 (23.9)	$1,288 (26.3)
63-64	852 (26.3)	973 (27.8)	1,353 (28.4)	1,309 (26.7)
65	1,021 (26.5)	859 (22.4)	1,319 (27.0)	1,947 (30.1)
66+	954 (22.5)	1,524 (31.4)	2,270 (38.5)	3,306 (43.7)

Source: NBS

n = 4,483

[a]Arrows show increasing notch disparity.

The distribution for savings and home equity by retirement age/PIA level reflects the pattern found earlier for income in relation to the notch disparity. Those who retired later and/or had higher PIAs tended on average to hold larger amounts of assets. Our data thus confirms that those who are likely to have large nominal dollar disparities arising from the notch tend to be those who, on average, have greater asset holdings.

Of the married male retired worker subsample, 98 percent had some net worth including equity in a home (see table 7.8) and, excluding the home, 94.2 percent still had some net worth. A large portion of the subsample also had equity in a home (87.2 percent), and 93.7 percent had some financial assets. Among financial assets, almost 93 percent had some form of savings account, checking, or credit union account. Lesser but still significant proportions had money market accounts or certificates of deposit (44.9 percent), and 32.2 percent held stocks and/or bonds.

Data for the average value of home equity appear in table 7.9. Mean home equity ranged between $36,000 and 66,000 for retirees with PIA levels below the median (see table 7.9). For those with above-median PIAs, values ranged from $54,000 to over $100,000 for the age 66 and over/highest PIA retiree category.

Table 7.8: Possession of Assets by Married Male Retired Workers, 62 and Older

Asset	Number (percent) Yes	No
Net worth, including home	4,397 (98.0)	86 (1.9)
Net worth, excluding home	4,224 (94.2)	259 (5.8)
Equity in home	3,913 (87.2)	570 (12.7)
Financial assets	4,205 (93.7)	278 (6.2)
Savings or checking account	4,163 (92.8)	320 (7.1)
Money market account or certificate of deposit	2,468 (55.0)	2,015 (44.9)
Stocks or bonds	1,443 (32.2)	3,040 (67.8)

Source: NBS

n = 4,483

Table 7.9: Home Equity of Married Male Retired Workers, by PIA and Retirement Age (In 1982)

Retirement age[a]	Mean home equity, by PIA category[a] Low	Low/middle	High/middle	High
62	$36,230	$40,189	$55,924	$55,338
63-64	42,056	43,975	54,164	56,740
65	48,521	54,620	58,418	64,801
66+	39,876	65,525	69,859	100,238

Source: NBS

n = 4,483

[a]Arrows show increasing notch disparity.

Other financial assets are likely to be considerably more liquid than home equity and thus represent a better indication of economic well-being in retirement (see table 7.10). Retirees with below-median PIAs generally had financial wealth in the $16-30,000 range. Those above the median PIA had financial assets in the $50- 100,000+ range. Those who retired at age 65 in the highest earner category averaged $88,898 in financial assets. For retirees who retired after 65 and were above the median PIA, assets averaged $102,835 for the high/middle PIA group and $154,373 for the highest PIA category.

The data further confirm the pattern seen with total income. Those who retired later and had higher PIAs tended to have greater assets. Thus, those likely to have experienced a greater notch disparity on average

had considerable net worth in a home and substantial financial assets. This pattern was also true of stock and bond holdings although to a somewhat lesser extent (see table 7.11).

Table 7.10: Financial Assets of Married Male Retired Workers, by PIA and Retirement Age (In 1982)

	Mean financial assets, by PIA category[a]			
Retirement age[a]	Low	Low/middle	High/middle	High
62	$16,047	$22,541	$67,914	$55,216
63-64	34,281	32,762	51,707	56,292
65	32,744	34,447	52,205	88,898
66+	36,870	63,149	102,835	154,373

Source: NBS

n = 4,483

[a]Arrows show increasing notch disparity.

Table 7.11: Value of Stock and Bond Holdings of Married Male Retired Workers, by PIA and Retirement Age (In 1982)

	Mean value of stock and bond holdings, by PIA category[a]			
Retirement age[a]	Low	Low/middle	High/middle	High
62	$2,321	$7,042	$40,758	$16,531
63-64	3,509	11,181	11,442	16,178
65	9,874	6,460	13,937	31,212
66+	12,200	19,656	39,267	62,390

Source: NBS

n = 4,483

[a]Arrows show increasing notch disparity.

Health Status

While the notch issue clearly relates to the economic status of retirees, data on their health status can give us some indication of their overall well being. Determining health status and its implications is difficult and dealing with its intricacies is well beyond the scope of this analysis. However, we did analyze some health data collected in the NBS and compared patterns in the data with the pattern of notch disparity, as discussed below.

Number of Health Problems

The NBS surveyed respondents on the number of health problems they experienced.[10] The data show that one-fifth of our subsample of retirees cite no health problems (see table 7.12). One-fourth of the subsample cited one health problem, and 21 percent said they had two. One-third of the sample reported having three or more health problems.

[10]For a listing of the health problems on which NBS respondents were queried, see app. VI.

Table 7.12: Number of Health Problems Reported by Male Retired Workers, 62 and Over

No. of problems cited	No. of retired workers	Percent of male subsample
0	1,081	20.4
1	1,360	25.6
2	1,117	21.1
3	790	14.9
4	463	8.7
5	272	5.1
More than 5	224	4.2

Source: NBS

n = 5,307

Taking the number of health problems as an indicator of health status, we reviewed data by retirement age/PIA level to compare patterns of health problems and notch disparity. For those reporting no health problems, we found a fairly uniform distribution across retirement age/PIA level. Slightly higher percentages of "healthy" individuals tended to be found in the age 65, higher PIA categories.

The lack of a strongly discernible pattern regarding the notch disparity is also present among those reporting one or two health problems. However, when those reporting three or more health problems were considered, a more noticeable pattern began to emerge. A greater frequency of such retirees was found in the earlier age categories. Also, those with greater health problems tended to concentrate in the lower PIA categories. For example, those reporting six health problems constituted about 2.5 percent of the male subsample. Of this group, 38 percent were in the age 62/lower PIA and age 63/64/lowest PIA categories. Such patterns suggest that those who are in poorer health tend to retire early and tend to be less well off economically (at least in terms of what they receive from social security). Those are the same individuals who are less likely to benefit from any increase in benefits due to notch legislation because they had the lowest notch disparities.

Activity Limitations

The NBS surveyed individuals concerning their ability to perform a variety of daily activities (see table 7.13).[11] Almost 65 percent of the subsample could perform all the daily activities, while just over one-third

[11]These activities include walking distances or flights of stairs; stooping, crouching, or kneeling; standing or sitting for long periods; lifting or carrying objects of various weights; and reaching and grasping.

(35 percent) were unable to perform at least one of the activities. Within the former category, we did not find a strong pattern across retirement age/PIA categories. A slightly higher concentration was found in the age 63/64, age 65, and higher earner categories. A more discernible pattern emerged for the latter group—those with activity limitations. As those with some limitations tended to be more concentrated in the earlier retiree and lower PIA categories, they are less likely to be substantially affected by the notch disparity or notch legislation.

Table 7.13: Ability of Male Retired Workers, 62 and Over, to Perform Daily Activities

Category	No limitation	At least one limitation
Retirement age:		
62	23.7%	33.6
63-64	28.0	26.9
65	29.0	20.9
66+	19.2	18.7
PIA level:		
Low	21.6	31.5
Low/middle	24.8	25.0
High/middle	27.6	24.3
High	26.0	19.1
All	**64.8**	**35.2**

Source: NBS

n = 5,307

Conclusions and Guidelines for Further Consideration of the Notch Issue

After considerable study, analysis, and policy debate over the past 9 years, the notch issue has remained unresolved. It is characterized by the technical complexity involved in devising a formula to award benefits that are adequate, equitable, and consistent across cohorts of retirees, while ensuring the social security system's continued solvency. Efforts to pursue a benefit structure that meets these objectives have led the Congress to pass legislation in 1972 and 1977 changing the benefit formula and to consider new legislation addressing the unanticipated disparities arising out of the 1977 changes.

The changes made in the benefit formula in 1972 helped improve the economic status of the elderly,[1] while the changes in 1977 helped assure that benefits would be equitable across future cohorts of beneficiaries and not be excessively burdensome to current and future workers. The 1977 Amendments have been generally successful in achieving their major goal of stabilizing replacement rates. Still, as we have documented, there can be benefit disparities between some members of adjacent retiree cohorts that are significant in dollar amounts, and this has created controversy.

The Transition Provisions Generally Worked as Intended

To address the problems related to the 1972 benefit formula, the Congress sought to stabilize future replacement rates and in the nearer term, lower replacement rates from the levels they reached in the mid- to late 1970s. It also intended to move future retirees into the new formula rapidly. Whether it was well understood how the transition between formulas would work once the 1977 legislation was implemented is unclear. Disparities between adjacent cohorts of retirees developed mainly because of

- the new benefit provisions, which reflected the intent to lower replacement rates;
- the separation, by birthdate, of those who would continue to use the old formula and those who were subject to the new law/transition provision; and
- higher-than-anticipated inflation subsequent to the implementation of the new law.

[1]Michael Hurd and John Shoven, "The Economic Status of the Elderly," in Z. Bodie and J. Shoven, Financial Aspects of the United States Pension System (Chicago: National Bureau of Economic Research and University of Chicago Press, 1983).

The benefit differences that developed are most clearly demonstrated by comparing adjacent 1916 and 1917 birth cohorts. Those born in 1917 who retire under the new law receive generally lower benefits than those born in 1916, except that there is virtually no difference for age 62 retirees. Those who retire at later ages and who have higher PIAs (based on higher lifetime earnings) tend to have larger benefit differences than those who retire earlier at lower PIA levels.

An important factor in the design of the transition provisions was the exclusion of post-age 61 earnings from the transitional guarantee. Individuals who worked longer and retired later did not have these earnings included in the benefit computation using the transitional guarantee. While this feature of the transitional guarantee may not be fully consistent with the goal of decoupling, it was intended principally as a means of phasing out the transitional guarantee. This objective was accomplished, though somewhat more abruptly than expected. Nevertheless, the intended reduction of replacement rates meant that some disparities between certain members of adjacent cohorts were still likely.

It is also important to consider how the transition provisions interacted with economic conditions as well as the setting of the new law's implementation date by age of eligibility (birth date). This latter element created a sharp break between those who could use the old law formula and those who came under the new law/transition provisions.

Subsequent to the 1977 Amendments, economic conditions worsened as the economy experienced higher-than-anticipated inflation along with prices rising more rapidly than wages. Retirees under the old law continued to receive the advantage of an overindexed formula. Inflation also helped the new wage-indexed formula to yield higher benefit levels more quickly compared with the transitional guarantee, which was (by design) largely unaffected by inflation and excluded post-age 61 earnings. Thus, allowing some retirees (pre-1917 birth year) to use the old formula, combined with higher than anticipated inflation, interacted with the way the transition provisions were designed to make the resulting disparities between adjacent cohorts even greater for some individuals.

It is important to recognize, however, that while those in the transition group receive lower relative benefits, they often compare their benefits to those of other individuals in the cohorts immediately prior to the transition who receive much higher benefits than ever were anticipated. Also, many in the transition group receive higher relative benefits than

those who retired after them and who are fully under the new law formula.

The goal of the 1977 legislation was to lower the growth of benefits to a level consistent with the historical goals of the social security program and to ensure adequate financing of the system. In achieving stable replacement rates, the goal of the benefit formula revision was fulfilled.

Other Facts Need to Be Considered

While there are technical reasons for the existence of a notch disparity and ample data to document it, many who claim to be affected by the notch may not be or may be no worse off relative to many others. Misinformation and misunderstanding about this issue has further led many to perceive that they are not being dealt with fairly. However, certain facts should be considered:

- Many in the transition group received higher replacement rates than many other social security retirees received historically.

  Replacement rates rose markedly between the early 1970s and the implementation of the new law. The new law put replacement rates on a declining path toward a lower, stabilized level. Thus, many in the transition group receive a higher replacement rate than those retiring before the mid-1970s and those retiring after the transition group. Other data show that, largely as a result of higher inflation, the actual replacement rates received by many in the transition group were much higher than anticipated at the time the 1977 Amendments were passed.

- Many retirees benefited from the general rise in inflation, relative to many in the working population

  After passage of the 1977 Amendments, the economy experienced a resurgence of rapid inflation. Largely through its effect on wages, this higher inflation contributed to higher nominal benefit awards. Inflation usually has the effect of lowering the real incomes (living standards) of those not protected from its effects. But the 1972 Amendments, in introducing automatic cost-of-living adjustments, protected the benefits of retirees from these effects. Thus, while many in the economy suffered real income losses from inflation, many of the elderly in the transition group were protected and gained relative to other groups in society.

- Some who experience the largest disparities are among those with higher relative income and assets.

The pattern of disparities varies by age of retirement and lifetime earnings level. Those who retired at earlier ages and had lower lifetime earnings generally tend to experience smaller notch disparities than those who retire later and had higher lifetime earnings. While individual circumstances vary greatly, and it is difficult to compare the relative well being of individuals, those most harmed by the notch are likely to be those who, on average, have higher retirement incomes and asset holdings.

A Policy Solution Faces Many Constraints

No amount of technical discussion and sophisticated analysis is sufficient to convince an individual that it is equitable for him to receive a benefit that is $100 less per month than his nearly identical neighbor. In our view, with the benefit of at least 9 years' hindsight it appears that it might have been better to have allowed the inclusion of post-age 61 earnings in the transitional guarantee computation. Data from SSA show that this would have permitted a smoother phase-out for later age retirees (see app. VII). While such a provision might not have prevented "notches" entirely, it would have alleviated a portion of the problem.[2]

We did not attempt to grapple with the largely theoretical question of when it is appropriate for the government to compensate individuals for "mistakes." There is simple logic to the exemption of pre-1977 retirees from the new rules, even though many received more from the system than was anticipated. When such a "mistake" is corrected, it often seems reasonable to make the correction applicable as soon as possible but to not seriously penalize those who unwittingly benefited from any error.[3] For individuals who are in the transition group and fully under the new law, it seems less wise to repeat the "mistake" of using the old

[2]This view is generally consistent with that expressed by Robert Myers, a leading expert on social security (see Myers, p. 331). Myers also notes that the computation of benefits for those born before 1917 should have treated earnings after 1978 under the new law formula. We also note that the use of a "blended" formula such as that suggested by the Hsiao panel seems much more attractive in hindsight.

[3]As an example of this logic, which we caution is not presented as having direct relevance to the notch issue, we note a discussion in relation to the social security "retirement test" and the overpayment of benefits, found in Marshall R. Colberg, The Social Security Retirement Test: Right or Wrong? (Washington, D.C.: American Enterprise Institute, 1978), pp.14-15:

"The Social Security Administration has quasi-judicial powers in various matters, including administration of the earnings test. If a beneficiary has been paid too much, there is ample room to forgive him and not recover the overpayment. If recovery 'would defeat the purpose of the program' or 'be against equity and good conscience' or if the recipient (including a survivor) is 'without fault,' repayment may be waived."

formula either partially or entirely for some, while making the correction of the benefit formula applicable to those far into the future.

The policy problem of correcting the notch must deal with pragmatic and complicated questions of who pays, who benefits, at what cost, and whether a "solution" is administratively feasible and avoids creating further problems that may be as serious as the ones solved. In this context, it is the role of the Congress to weigh the facts and evidence and decide whether some form of compensation is warranted. If the Congress decides that compensation is warranted, it must balance a number of factors in deciding on the appropriate legislative solution.

Matters for Consideration by the Congress

The Congress should consider the following matters in evaluating legislative proposals concerning the notch issue.

- The financing of notch legislation should be as neutral as possible in its effect on the Social Security Trust Funds (and, where relevant, the federal budget).

Although the short-run condition of the trust funds is improving, this condition must be viewed with caution for the next few years. Furthermore, while the trust funds are building what appear to be large balances, these are expected to represent only minimum contingency levels by the mid-1990s. "Surplus reserves" will begin to accumulate only after this point. Although these balances appear large in dollar terms and in relation to the estimated cost of some proposed notch legislation, the diminution of the trust funds to finance notch legislation delays (or may preclude) the system's achievement of desirable contingency levels. The use of the trust funds to finance notch legislation carries some risk in the event that the economy enters a recession. Furthermore, the purpose of building surplus reserves is to partially fund the future benefits of the Baby Boom generation. Use of the trust funds to pay for notch legislation effectively shifts into the future the burden of paying higher benefits to the notch group. That is, future workers may have to pay higher taxes to make up for the funds that may be used up currently to pay higher notch benefits.

If the trust fund accumulations under current law are not used, the remaining options concern some form of additional taxation of current workers or reductions in costs (i.e., reducing the benefits of some other group). Additional payroll taxation does not seem to be a desirable option because current workers are already paying a higher payroll tax

rate than necessary under current cost (pay-as-you-go) financing to restore the system's contingency reserves and build the longer term reserves. Also, the condition of the Hospital Insurance Trust Fund suggests that the option of higher payroll taxes might be needed to preserve its solvency in the future.

From an equity standpoint, there seems to be merit to financing any notch legislation at least to a partial degree by reducing the growth in benefits of those who received windfalls through use of the old rules. However, this was rejected some time ago and would require reassessing the decision in the 1977 Amendments to not affect the benefits of the pretransition group. As this group is decreasing in size over time, the potential for significant savings is diminishing. Further, there are likely to be difficulties in deciding to whom the reductions would apply and in implementing them.

Clearly, the issue of financing has presented and still presents the most serious impediment to the adoption of notch legislation assuming that compensation is warranted. The balancing of these factors under our criteria suggests that the cost of any legislative solution must be kept low. One factor to consider is whether to award retroactive benefits; some have suggested that payment of such benefits be eliminated. We agree that this should be considered as part of reducing the cost of any notch legislation.

- Feasibility of implementation should be given consideration.

Because the notch issue has spanned quite a few years, the administrative complexity of implementing notch legislation has increased. Such legislation could require SSA to perform recomputations for millions of beneficiaries. This could place an additional burden on an agency that has already experienced recent staff and resource cuts and could likely involve a significant additional expenditure and/or reallocation of resources within the agency. Also, revised transition formulas that appear simple in concept may not be simple to implement. Notch legislation should not be adopted without careful consideration of SSA's ability to efficiently and effectively implement it and bear the associated administrative costs.

- The transition period should not be lengthened.

The transition period adopted in 1977 constituted sufficient notice that the benefit formula changed and also provided some beneficiaries with

higher benefits than they would have received from the new wage-indexed formula. Consequently, the transition period should not be lengthened further. As we noted, its effective length essentially is determined by the benefit formula provisions themselves. The problem with the transitional guarantee is not so much that the transition period was too short but that the guarantee phased out more abruptly than expected within the 5-year period. Lengthening the transition period would draw more individuals into the controversy and could extend higher benefits to those who now come fully under the correct and stable new law formula.

Agency Comments

The Department of Health and Human Services was provided the opportunity to comment on a draft of this report (see app. VIII). Overall, the Department agreed with GAO's findings, but said that more emphasis should be placed on the overcompensation of retirees born just prior to 1917. GAO believes that the issue is sufficiently discussed.

Congressional Request Letter

COMMITTEE ON WAYS AND MEANS

U.S. HOUSE OF REPRESENTATIVES

WASHINGTON, DC 20515

SUBCOMMITTEE ON SOCIAL SECURITY

April 30, 1986

Honorable Charles A. Bowsher
Comptroller General of the United States
General Accounting Office
441 G Street, N.W.
Washington, D.C. 20548

Dear Mr. Bowsher:

As you may know, the "notch" in benefit levels that resulted from the Social Security Amendments of 1977 has proven to be a very controversial and confusing subject in the Congress, the media, and the public. As Chairman of the Social Security Subcommittee of the Committee on Ways and Means, I have been approached by many colleagues and constituents on the "notch," and have heard much anecdotal information about its effect on beneficiaries. Before the Congress considers any legislative proposals to lessen or eliminate the "notch," I would like the General Accounting Office (GAO) to conduct a complete investigation of how the "notch" arose, what beneficiaries are affected by it, and what alternatives exist for financing any increase in benefit expenditures that would result from remedial legislation in this area.

Overall, I would like the GAO to organize its study around a number of important questions that would improve our understanding of the causes and effects of the "notch."

First, it is often stated that the 1977 amendments generated enormous unintended effects that Congress did not expect at the time the legislation was enacted. In this regard, I would like to know:

(a) To what degree do the disparities in benefit levels among different age cohorts exceed Congressional expectations, and why did this occur?

(b) Does any specific beneficiary group receive lower real benefits than Congress anticipated, or are the disparities in benefit levels a product of certain beneficiaries receiving more generous benefits than anticipated?

(c) By year of birth, how are typical workers with low, average, and high earnings, respectively, affected by the "notch?"

(d) What would have been the effect on benefits calculated under the transitional rule had economic circumstances been more favorable in the late 1970s?

(e) Has the key objective of the 1977 amendments -- the stabilization of benefit levels in relation to pre-retirement earnings -- been achieved?

Second, I am very interested in a detailed analysis of the social and economic characteristics of the beneficiary groups disadvantaged by the "notch." I would like GAO to examine a sample of the population affected by the "notch," divide the sample into categories based on the amount by which their real benefits are less than they would have been had the 1977 amendments not been enacted, and provide statistics on the income, assets, and health status of each group. I want to know what sorts of people typically receive significantly lower benefits as a result of the 1977 amendments, and what this reduction means from the larger picture of household income and resources. In considering legislation to lessen the effects of the notch, I think Congress would benefit from an analysis of who would gain most by such proposals.

Finally, I would like GAO to look into the financial consequences of legislative proposals that would lessen the discontinuity between benefits paid under the old and new law formulas. I would be interested in a thorough review of the alternatives available to the Congress to finance the benefit increases that would result from such legislation.

I appreciate your attention to this matter.

Sincerely,

JAMES R. JONES
Chairman

Background on GAO's Data Analysis Effort

In his letter of request, the Chairman of the House Committee on Ways and Means, Subcommittee on Social Security, asked us to take a sample of notch individuals, "stratify" it by the extent to which individuals are affected by the notch, and provide data on the income, assets, and health status of the group and how these characteristics vary by the extent of notch disparity.

Compiling such data presented several problems. Obtaining such comprehensive data on individuals required the satisfaction of a number of key elements. Specifically, the study required the following:

1. Information on individual's social security benefits and status, date and age of retirement, and earnings' history sufficient to calculate benefits under alternative formulas and assumptions and for different time periods.

2. Detailed socioeconomic data on individuals for such variables as income and its components (including other pensions and earnings) and the extent and nature of asset holdings, and information on health status.

3. Data that is longitudinal, i.e., the same individuals should be surveyed over more than one time period in order to study changes over time. Short of this, the data source should be sufficiently comprehensive to permit us to obtain a complete cross section of notch individuals retiring at different ages and time periods.

4. Consistent definition of the notch disparity and to whom the definition applies.

After reviewing several data sources, we determined that no one source could adequately satisfy all the necessary criteria. For example, the Current Population Survey (CPS) and the Survey of Income and Program Participation (SIPP), both compiled by the Bureau of the Census, contain much useful information about the elderly. However, neither of those sources is merged with detailed information from social security beneficiary records.

The CPS samples a large cross section of households in the United States each year and provides detailed information on income and labor force participation. Much of the current CPS data on the aged evolved from earlier efforts by SSA to collect data on older persons; this is reflected in the SSA publication Income of the Population, 55 and Over. These earlier

data collection efforts by SSA (in the 1970s), which were aimed at linking data on the elderly's economic position with SSA beneficiary record data, culminated in the 1973 CPS-IRS-SSA Exact Match Study. This ambitious effort proved useful but also was beset by technical and legal issues. Updated information from it is not generally available to the public today.[1]

Another data source we reviewed, SIPP, is longitudinal and encompasses data on households and individuals, their employment history, sources of income including government transfers and financial assets, and extensive socioeconomic information. The Bureau of the Census began the survey in 1983-84 with a sample panel of over 20,000 households and their members. Second and third waves of the study were added during 1985 and 1986. The survey contains a retirement module with extensive socioeconomic data on the elderly. However, SIPP suffers from the same general problem as CPS in that it is not linked with detailed social security beneficiary data sufficient to examine a cohort such as the notch group.

During our review, we learned that there is currently an ongoing effort to link SIPP to social security records. Such a merged set of data no doubt would be close to ideal for our purposes. But Census officials told us that the project is at least 2 or 3 years from completion.[2]

As a result of anticipated difficulties with CPS and SIPP, we focused on SSA's New Beneficiary Survey (NBS) as perhaps the best available source of data applicable to the Chairman's request.[3]

[1]For an overview of these issues, see Sheldon E. Haber, "A Perspective on Linking SIPP to Administrative and Statistical Records," Journal of Economic and Social Measurement, Vol. 13, Nos. 3 and 4, Dec. 1985, pp. 336-7. For information on the Exact Match Study, see Beth Kilss, Fritz Scheuren, Fay Aziz, and Linda DelBane, "The 1973 CPS-IRS-SSA Exact Match Study: Past, Present and Future," in Policy Analysis with Social Security Research Files, Proceedings, SSA, 1978.

[2]For more discussion of the project, see Haber (1985) and, in the same publication, Gary S. Fields and George H. Jakubson, "Labor Market Analysis Using SIPP," pp. 281-286.

[3]Fairly extensive research using the NBS has been conducted, and some studies may be relevant to the data discussed in ch. 7. Among these are: Linda Drazga Maxfield, "Income of New Retired-Workers by Age at First Benefit Receipt," Social Security Bulletin, July 1985, pp. 7-26; Sally R. Sherman, "Assets of New Retired-Worker Beneficiaries," Social Security Bulletin, July 1985, pp. 27-43; and Christine Irick, "Income of New Retired Workers by Social Security Benefit Levels," Social Security Bulletin, May 1985, pp. 7-23.

The Replacement Rate: An Important Measure

In analyzing the issues that surround the benefit formula, the most useful analytical concept is the replacement ratio or rate. The replacement rate, which relates an individual's benefit amount (PIA) to his or her preretirement earnings, provides a measure of the percentage of an individual's preretirement living standard that is replaced by retirement benefits. The replacement rate provides a means for comparing benefit amounts across individuals who have varying earnings' histories. It also is possible to link the future behavior of replacement rates to the behavior of required future payroll tax rates in a fairly direct fashion.[1]

The replacement rate provides some information as to whether retirement benefits are "adequate." A rate of 100 percent means that the recipient's benefit fully replaces preretirement earnings. There is no definition of adequate, but in most cases a replacement rate of less than 100 percent is considered adequate. There are several reasons for this; one is that social security benefits generally are not fully taxed. Although such benefits now are taxed for higher income individuals, many recipients' benefits are exempt from state, federal, and local taxes.[2]

A second reason that replacement rates of less than 100 percent may be considered adequate is that workers may be entitled to retirement income from a pension based on employment for a private company, the government, or from a profit-sharing plan. Somewhat over half of all wage and salary workers are covered by a private pension plan. For those receiving benefits, private pensions replaced 24 percent of average earnings, one survey of private pensions found.[3]

Another reason for a replacement rate of less than 100 percent may be changes in living costs due to retirement. Retirees may move to a less expensive area after retirement and may not incur work-related expenses.

[1]See Thompson, pp. 497-504.

[2]Social security benefits are implicitly taxed for retirees with earnings above certain limits—the so-called "earnings' test." In 1988, the earnings' test applied to annual earnings of benefit recipients above $8,400 for those age 65-69 and $6,120 for those under age 65. However, these earnings supplement the retiree's retirement income.

[3]In 1983, 49.5 million (56 percent) of 88.2 million nonagricultural wage and salary workers reported they were covered by a private pension plan. See Emily S. Andrews, The Changing Profile of Pensions in America. (Washington, D.C.: Employee Benefits Research Institute, 1985), p. 51. Also, data on private pension replacement rates is from Findings From The Survey of Private Pension Benefit Amounts (Washington, D.C.: Department of Labor, 1985), p. 1.

Social security never was intended to provide more than a "floor of economic protection" for the retired. The individual is expected to supplement retirement income through other pensions and private savings. The goal of assuring a socially adequate benefit is reflected in the progressivity of the benefit formula, which provides a higher replacement rate for lower income workers, usually those less able to save.

As a technical tool, the replacement rate must be used with some caution. This particularly applies to the denominator—preretirement earnings. The replacement rate will vary depending on the measure of preretirement earnings used. Quite often, the earnings in the year just prior to retirement are used as a measure. For any particular individual, this may be quite unrealistic, as earnings can vary substantially over a worker's career, but it is generally valid for the hypothetical steady-worker illustrations.

Other measures might be used, and other factors such as taxation could be taken into account in calculating replacement rates. One view is that the replacement ratio should reflect after-tax preretirement earnings, and these should be compared with untaxed benefits. While we agree that this may be more accurate, we did not adjust our data in this manner, largely to maintain consistency with other studies and data.

Notch Legislation Proposed in the 100th Congress

Bill no.	Principal sponsor	Date introduced
H.R. 121	Rep. Daub (R-NEB)	1/6/87
H.R. 227	Rep. Quillen (R-TN)	1/6/87
H.R. 416	Rep. Roe (D-NJ)	1/6/87
H.R. 1026	Rep. Bilirakis (R-FLA)	2/5/87
H.R. 1027	Rep. Boner (D-TN)	2/5/87
H.R. 1057	Rep. Grey (D-IL)	2/9/87
H.R. 1264	Rep. Morrison (D-CT)	2/25/87
H.R. 1357	Rep. Frank (D-MA)	3/3/87
H.R. 1359	Rep. Frank (D-MA)	3/3/87
H.R. 1721	Rep. Daub (D-NEB)	3/19/87
H.R. 1917	Rep. Roybal (D-CA)	4/2/87
H.R. 2107	Rep. Wortley (R-NY)	4/21/87
H.R. 3788	Rep. Ford (D-TN)	12/17/87
H.Con.Res. 11	Rep. Moakley (D-MA)	1/6/87
H.Con.Res. 15	Rep. Lent (R-NY)	1/6/87
H.Con.Res. 72	Rep. DeLa Garza (D-TX)	3/11/87
S.225	Sen. D'Amato (R-NY)	1/6/87
S.1119	Sen. Specter (R-PA)	5/1/87
S.1830	Sen. Sanford (D-NC)	10/29/87
S.1917	Sen. Heinz (R-PA)	12/3/87

Estimated Cost of Additional OASDI Benefit Payments Under Notch Bills Pending in the 100th Congress

Figures are in billions of 1987 dollars.

Year	Notch bill								
	H.R. 227	H.R. 1026	H.R. 1027[a]	H.R. 1359	H.R. 1721[b]	H.R. 1917	S.225[c]	S.1119[d]	S.1830[e]
1987	•	f	•	g	$2.2	$15.5	•	$26+	$9.4
1988	$17+	f	$17+	g	2.6	5.6	54.9	14–17	4.6
1989	22+	f	22+	g	2.7	6.5	18.8	17–22	5.3
1990	27+	f	27+	g	2.8	7.3	22.2	20–27	5.9
1991	33+	f	33+	g	2.8	7.9	25.7	24–33	6.4
1992	40+	f	40+	g	2.8	8.3	29.2	27–30	6.8
1993	47+	f	47+	g	2.8	8.5	32.7	31–47	7.1
1994	55+	f	55+	g	2.8	8.7	36.3	34–55	7.3
1995	63+	f	63+	g	2.8	8.9	39.8	38–53	7.4
1996	72+	f	72+	g	2.8	9.0	43.3	41–72	7.4
Totals, 1987-96	**$379+**		**$379+**		**$24.3**	**$86.4**	**$302.8**	**$284–379**	**$67.5**

Source: SSA, Office of the Actuary.

Note: Costs shown for H.R. 1917 and 1721 and S.225 are based on the alternative II-B economic assumptions from the 1987 Trustees' Report. All others are based on the II-B assumptions from the 1986 report; updated values would not differ significantly.

[a]Costs for H.R. 1357 would be similar or identical to those shown for H.R. 1027.

[b]Costs are the same for S.1917.

[c]Costs for similar bills, H.R. 416, 1057, 2107, and 1264, would vary somewhat from the figures shown for S.225, depending on the specific provisions of each bill (particularly its effective date).

[d]As specific costs were not available, a range of values is shown as a general indication of the expected cost level.

[e]Cost are the same for H.R. 3788.

[f]Proposal not adequately specified.

[g]Estimates not yet available.

Health Problems Surveyed in the New Beneficiary Survey

The information on the number of health problems experienced by NBS respondents was obtained by asking those surveyed to respond yes or no concerning whether they had any of the following conditions:

a. Blindness or serious trouble seeing with one or both eyes, even when wearing glasses.

b. Cataracts, glaucoma, or any other condition affecting the eye or retina.

c. Deafness or serious trouble hearing with one or both ears, even when wearing a hearing aid.

d. A missing hand, or arm, foot, or leg.

e. Arthritis, rheumatism, or any other condition affecting the bones or muscles.

f. Permanent stiffness or any deformity of the foot, leg, fingers, arm or back.

g. Multiple sclerosis, cerebral palsy, epilepsy, or any other condition affecting the nervous system.

h. Paralysis of any kind not already mentioned above.

i. Asthma, emphysema or any other condition affecting the lungs or respiratory system, including work-related respiratory conditions such as silicosis or pneumoconiosis.

j. Gallbladder, stomach, kidney, or liver trouble, diabetes, or any other condition affecting the digestive system.

k. Cancer or a malignant tumor or growth not already mentioned above.

l. Nervous or emotional problems, or mental illness.

Comparison of Social Security Benefits for Retirees Under Current Law and a Modification of Current Law Transition to Include Post-Age 61 Earnings

	Monthly benefits in 1997 in 1986 dollars[a]					
	Retirement at 62[b]		Retirement at 65		Retirement at 70[c]	
Year of birth	Current law	Alternative	Current law	Alternative	Current law	Alternative
1916[d]	$484	•	$685	•	$881	•
1917	494	$493	618	$708	765	$977
1918	464	465	594	668	742	907
1919	441	442	564	607	696	806
1920	432	432	550	557	672	734
1921	443	444	561	562[e]	682	698
1922	451	•	571	•	693	•

Source: SSA

[a]Benefits computed for average earner, using alternative II-B assumption of 1986 Trustee's Report.

[b]Benefit includes reduction for early retirement. Benefit under alternative is the same as under current law for age 62 retirees because they do not have any earnings after age 61.

[c]Benefit includes credit for delayed retirement.

[d]Workers born in 1916 and 1922 shown for comparison only. The transition does not apply to them.

[e]Current law benefit payable because it exceeds transitional benefit.

Comments From the Department of Health and Human Services

DEPARTMENT OF HEALTH & HUMAN SERVICES

Office of Inspector General

Washington, D.C. 20201

MAR 21 1988

Mr. Edward A. Densmore
Deputy Director, Human Resources
Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Densmore:

Enclosed are the Department's comments on your draft report, "Social Security: The Notch Issue." The enclosed comments represent the tentative position of the Department and are subject to reevaluation when the final version of this report is received.

The Department appreciates the opportunity to comment on this draft report before its publication.

Sincerely yours,

Richard P. Kusserow
Inspector General

Enclosure

COMMENTS OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES ON THE GENERAL ACCOUNTING OFFICE DRAFT REPORT: "SOCIAL SECURITY: THE NOTCH ISSUE"

Overall, the General Accounting Office (GAO) report is a very good effort on a highly technical and complex subject. The report is a generally balanced presentation of the subject. However, we believe the report does not give sufficient emphasis to the extent to which the notch problem is one of windfall benefits being paid to workers who were born in the years 1910-16.

We believe it is critical to recognize that in addition to the question of high cost, all of the recommended solutions to fix the "notch" would involve a degree of poor benefit design being incorporated into the basic structure of the program (i.e., resulting in imbalances or "notches.")

We have many technical comments on the report. At the request of GAO staff, Social Security Administration (SSA) staff met with them to discuss and transmit these technical comments. This arrangement was necessary because of the extremely short time provided to SSA for analysis and comments.

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(105511)

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General Accounting Office
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