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Issue Brief

The Regressive Impact of the Progressive Indexation of Social Security Benefits

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Executive Summary

This paper examines the distributional impact of the formula for the progressive price indexation of Social Security benefits that President Bush endorsed in his April 28 press conference. This formula would not change the current indexation of benefits for the bottom 30 percent of wage earners, but would change the basis of indexation for the highest wage earners from wages to prices, thereby holding the real value of Social Security benefits for maximum wage earners (those earning $90,000 or more a year in 2005) constant through time. Workers who are above the 30 percent cut off would see their benefits rise somewhere between the rate of wage growth and price growth.

While this schedule of benefit cuts is supposed to be progressive, the calculations in this paper show that middle--income earners would see large and growing benefit cuts (measured against currently scheduled benefits) under this formula:

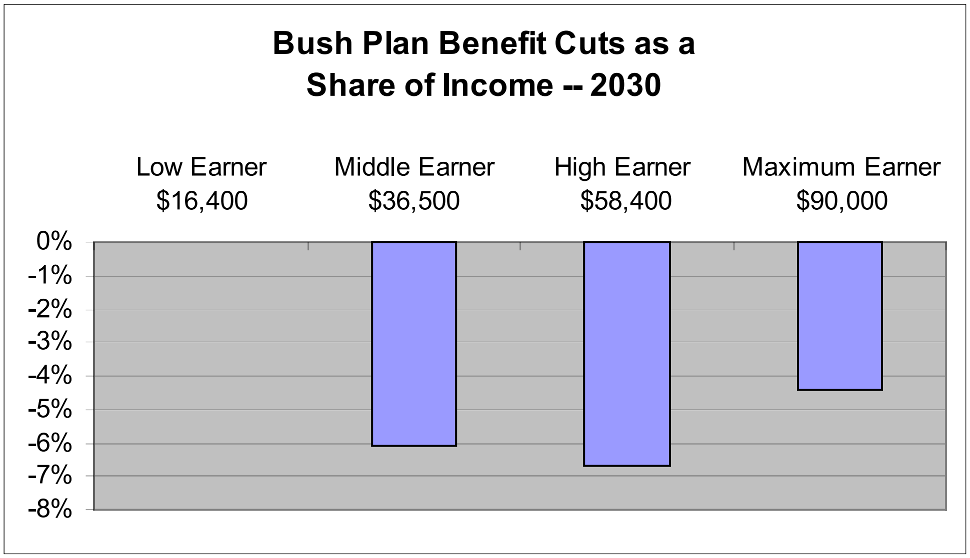
* In 2030, a middle wage earner ($36,500 in annual earnings in 2005) would see a benefit cut of 9.1 percent, while a high wage earner ($58,400 in 2005) would see a benefit cut of 14.3 percent;

* In 2050, a year when the Congressional Budget Office projects that Social Security would still be able to pay full scheduled benefits if no changes are made, middle wage earners would see a cut equal to 18.7 percent of their scheduled benefit, while high wage earners would see a cut equal to 29.4 percent of their scheduled benefit;

*By 2080, the benefit cut for middle wage earners and high wage earners will have grown to 35.4 percent and 49.9 percent, respectively. At this point, low earners ($16,400 in 2005) and maximum earners ($90,000 in 2005) will be receiving almost the same benefit, even though a maximum wage earner will have paid more than five times as much money into the Social Security system;

* Measured relative to retirement income, the benefit cuts implied by progressive indexation are regressive. The projected cut in benefits for a middle wage earner in 2080 is equal to 23.7 percent of their retirement income, while the implied cut for a maximum wage earner would be equal to just 11.1 percent of their retirement income. The relative impact of these cuts is shown in Figure 3 below. In other words, the cuts implied by progressive indexation will hit middle-income workers hardest;

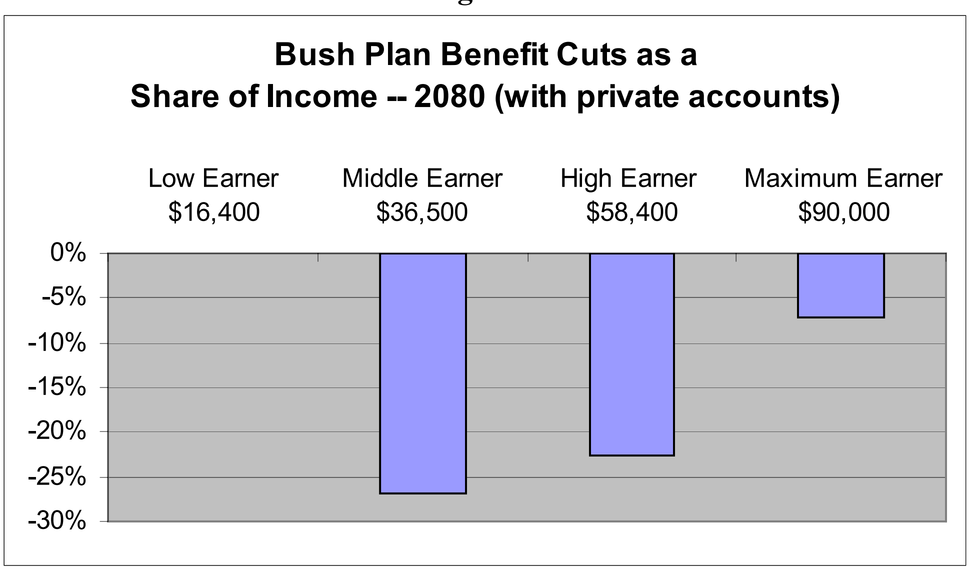
Figure 3



Source: Author's calculations, see appendix.

* When coupled with private accounts, the benefit cuts create a situation in which the highest earning workers will owe the Social Security system an amount of money that is larger than their remaining Social Security benefit, if they opt for a private account. President Bush has created no mechanism through which this money can be reclaimed. This creates a situation in which the highest wage earners will be able to place money in a private account without any offsetting cut in benefits. As a result, the implied cut in benefits will fall even more sharply on middle--income workers.

Figure 4



Source: Author's calculations, see appendix.

While progressive indexation will lead to a cut in benefits of 35.4 percent for a middle earner in 2080, the cut for a maximum wage earner will be slightly higher at 39.6 percent, if no mechanism is put in place to reclaim the money placed in a private account. When measured as a share of retirement income, the implied cuts are even more regressive. With President Bush's private account option, the implied cuts from progressive indexation formula are equal to 23.7 percent of retirement income for middle wage earners. The cut for the highest wage earners would be equal to just 7.8 percent of their income as shown in Figure 4.

In short, progressive indexation would put in place a formula that would disproportionately hit middle-income retirees. This effect will be worsened if President Bush's proposal for private accounts is adopted, since those accounts would allow the highest income workers to evade much of the cuts implied by this indexation formula.

Introduction

After committing himself to giving workers the option of replacing a portion of their guaranteed Social Security benefit with private accounts, in his State of the Union Address in February, President Bush has now outlined a set of benefit cuts that he would like to put in place alongside these accounts. This schedule of cuts has been dubbed "progressive indexation," since it would phase in cuts that disproportionately fall on middle and higher income workers, while protecting lower income workers. The benefits of the highest income workers would be indexed to the overall rate of inflation, so that they would not rise in step with wage growth, as they do under current law. However, the proposal leaves in place the current indexation formula for the lowest earning third of the workforce, so that their benefits would continue to rise in step with real wage growth.

This paper examines the impact of this schedule of benefit cuts. It shows the size of the projected cuts both as a share of currently scheduled benefits and also relative to the total income of workers over age 65. The calculations show that this schedule of benefit cuts, while protecting the poorest of the elderly, will be very regressive among the elderly population as a whole, hitting middle income beneficiaries the hardest.

The paper also examines the combined effects of progressive indexation and the system of private accounts proposed by President Bush. Under President Bush's plan, the money placed in private accounts is effectively treated as a loan to workers. It is repaid at retirement from the workers' guaranteed Social Security benefit. However, the progressive indexation formula would cut the guaranteed Social Security benefit by a large enough amount that eventually it would not be sufficient to offset the money that high income workers place in private accounts. Unless a new mechanism is created to take back money from these workers, the progressive indexation formula will eventually create a situation in which the highest income workers can place money into private accounts without any offset. This paper also examines the distributive impact of this situation.

The Arithmetic of Progressive Indexation

The idea of progressive indexation is derived from a plan put forward by President Bush's Social Security commission, which would have switched the indexation of the basic Social Security benefit from wages to prices. Under current law, Social Security benefits keep pace with wage growth in the economy. The intention of this indexation is to ensure that the program will always replace approximately the same share of wage income through time.

The current benefit formula is highly progressive, with low-income workers receiving a benefit that is equal to approximately 50 percent of their average wage over their working career, while the highest income workers receive a benefit that is just over 20 percent of their average wage. Under the current formula, higher wage workers pay more taxes than lower wage workers, but also receive a higher benefit. The payback rate or rate of return is lower for higher wage workers than lower wage workers, but they do get additional benefits to compensate for their higher tax payments.

The progressive indexation proposal put forward by President Bush would fundamentally alter this structure by effectively freezing the real value of benefits for the highest income workers, while allowing the current benefit formula to remain in place for the bottom 30 percent of wage earners (those earning less than $22,000 a year at present). This would have the effect of compressing the benefit structure, with the benefits received by lower paid workers eventually becoming equal to the benefits of the highest paid workers. This means that higher paid workers will receive no additional benefits, even though they have paid far more in taxes than lower paid workers during their working lifetime.

President Bush's pan for progressive indexation also implies substantial benefit cuts for all but the lowest paid workers. These cuts will increase through time, so that the impact on older workers will be limited; but younger workers, or those who are yet to enter the work force will experience large cuts in benefits.

Table 1
Benefit Cuts With Progressive Indexation

	2030			
2005 Earnings Schedule	**Current Law Benefit**	**Bush Benefit**	**Cut as Percent of Benefit**	**Cut as Percent of Income**
Low Earner 16,400	$949	$949	0.0%	0.0%
Middle Earner $36,500	$1,591	$1,396	-12.2%	-8.2%
High Earner 58,400	$1,908	$1,656	-13.2%	-6.2%
Maximum Earner $90,000	$2,380	$1,814	-23.8%	-4.7%
	2050			
	Current Law Benefit	**Bush Benefit**	**Cut as Percent of Benefit**	**Cut as Percent of Income**
Low Earner 16,400	$1,229	$1,229	0.0%	0.0%
Middle Earner - $36,500	$2,058	$1,623	-21.1%	-14.2%
High Earner - $58,400	$2,469	$1,771	-28.3%	-13.3%
Maximum Earner - $90,000	$3,081	$1,814	-41.1%	-8.1%
	2080			
	Current Law Benefit	**Bush Benefit**	**Cut as Percent of Benefit**	**Cut as Percent of Income**
Low Earner 16,400	$1,811	$1,811	0.0%	0.0%
Middle Earner - $36,500	$3,033	$1,814	-40.2%	-26.9%
High Earner - $58,400	$3,638	$1,814	-50.1%	-23.6%
Maximum Earner - $90,000	$4,539	$1,814	-60.0%	-11.9%

Source: Author's Calculations, see appendix.

Table 1 shows the projected cuts in benefits for 2030, 2050 and 2080 under the progressive indexation formula endorsed by President Bush. The earnings levels in the first column shows the earnings levels that correspond to the Social Security Administration's definitions for "low earners," "medium earners," "higher earners' and "maximum earners" in 2005. These earnings levels would rise in real terms (in excess of the rate of inflation) by 1.3 percent annually, according to the projections from the Congressional Budget Office (CBO). (By the end of the period in 2080, real wages are projected to be on average more then 2.5 times as high as they are today.)

As can be seen in Table 1, the benefit for low earners is protected throughout the 75-year planning period, rising as fast with progressive indexation as is scheduled under current law. However, the benefits for most workers would be cut substantially compared with the benefit provided under current law. By 2030, a medium wage earner would be faced with a benefit cut of more than 9 percent, while a maximum wage earner would see a cut of more than 22 percent, compared with the benefit provided under current law.

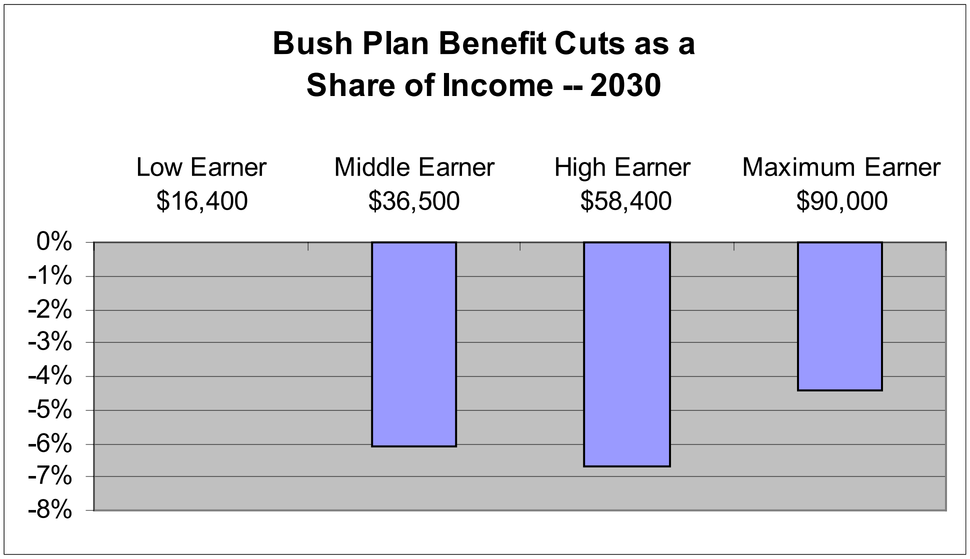
The projected cuts would be considerably sharper by 2050, with a middle earner facing a cut of almost 19 percent and a maximum wage earner facing a cut of more than 40 percent. It is worth noting that CBO projects that the program would still be paying full benefits in 2050, even if nothing is ever done to improve the program's finances. By the end of the 75-year projection period in 2080, the cut for medium earners would be more than 35 percent compared with the currently scheduled benefit, while the cut for maximum wage earners would be almost 60 percent.

One striking feature of the projections in Table 1 is the convergence of benefit levels, with workers at all four wage levels earning a virtually identical benefit by 2080 under progressive indexation. The effect of progressive indexation over time is to effectively make the Social Security payment into a pure tax. While the current benefit structure is progressive so that returns are less for higher income workers, those who pay more into the system get more money back from the system. Under the progressive indexation formula, most workers will eventually get the same benefit back from Social Security, even if they paid very different amounts of taxes to the system. In the projections shown for 2080, a maximum wage earner will get almost the exact same benefit as a low earner, even though the maximum wage earner paid more than 5 times as much in Social Security taxes. This is clearly a radical departure from the current structure of the program.

It is also important to realize that the proposed benefit cut under progressive indexation is actually very regressive, if it is measured relative to the income of Social Security beneficiaries. The reason that the resulting benefit cut is regressive is that middle income workers are far more dependent on income from Social Security in retirement than are higher income workers. This means that even though the benefits for the highest income workers are cut by the most in percentage terms, middle income retirees will actually see the largest percentage loss in retirement income as a result of the proposed benefit cuts.

Figure 1 shows projections of the size of the benefit cuts measured as a share of retirees' income in 2030.

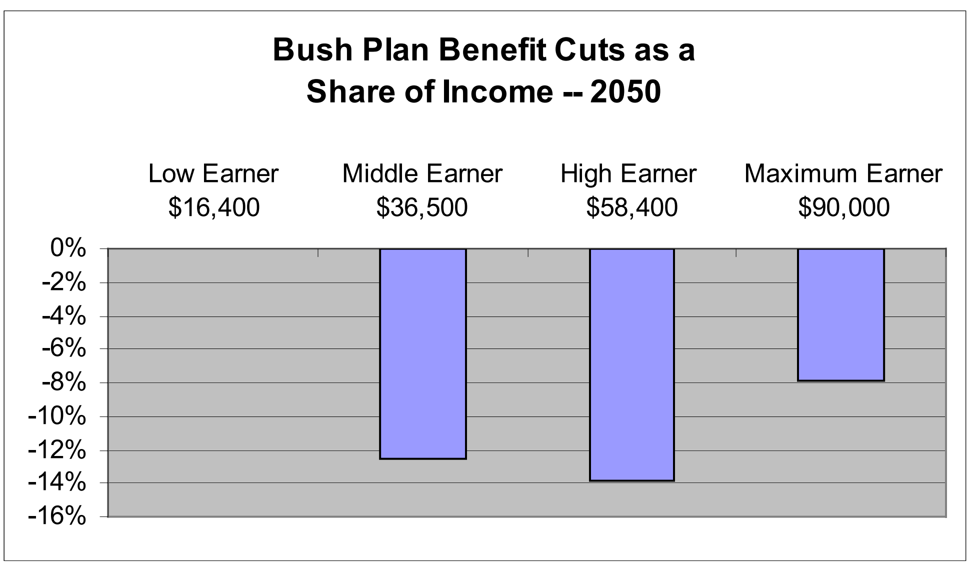
Figure 1



Source: Author's Calculations, see appendix.

The figure shows that the benefit cut projected for a middle earner in 2030 will be equal to more than 6.0 percent of their income after they turn age 65. The cut would be a slightly larger share of income for a high wage earner, but would be just over 4.0 percent of the income of a maximum wage earner. Low earners are protected from cuts, so the graph shows that their retirement income will not be affected.

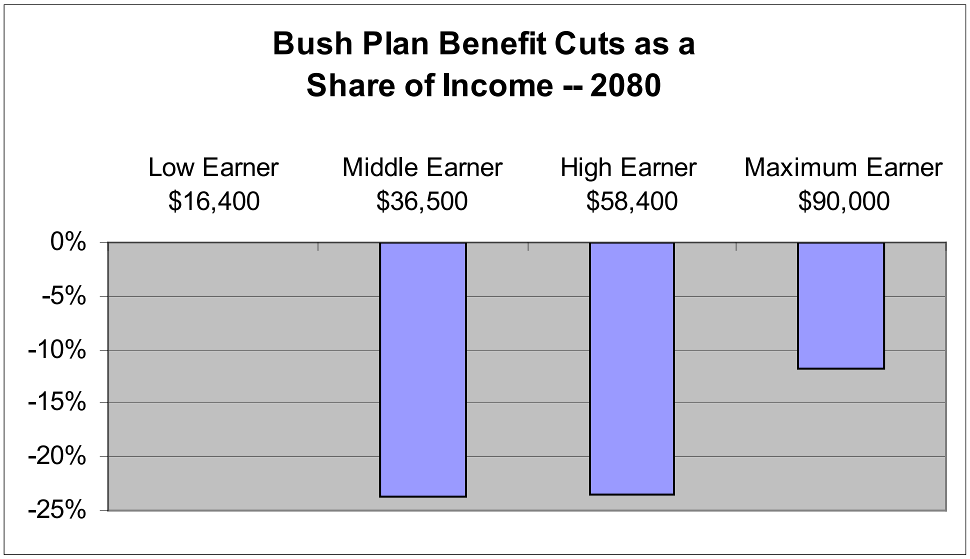
Figure 2



Source: Author's Calculations, see appendix.

Figure 2 shows the same set of projections for 2050. By this point, the cuts for a middle earner will have risen to be more than 12 percent of their projected income. The progressive indexation formula cuts benefits for maximum wage earners by just under 8 percent by 2050.

Figure 3



Source: Author's Calculations, see appendix.

Figure 3 shows projections for benefit cuts as a share of income at the end of the projection period in 2080. The progressive indexation formula would lead to a benefit cut that is almost 24 percent of the projected income for a retired middle earner in that year. The benefit cut for a maximum wage earner would be under 12 percent, less than one-half as large when measured as a share of income. The projected benefit cut for a higher earner would be just over 23 percent of their income.

In short, the progressive indexation formula endorsed by President Bush would have the largest impact on middle--income retirees. While it would cut the Social Security benefit of the highest income retirees by a larger percentage, because high--income workers are less dependent on Social Security income in their retirement, these cuts would have far less impact on the living standards of the highest income retirees than on middle income retirees. Clearly, middle--income workers are hit hardest by the schedule of benefit cuts put in place under progressive indexation.

The Mechanics of Progressive Indexation and Individual Accounts

While the basic formula for benefit cuts through progressive indexation imposes the largest burden on middle--income workers, the eventual impact may prove to be even more regressive when coupled with the system of private accounts proposed by President Bush. The complex accounting system in the President's privatization plan could create a situation in which higher income workers can evade the benefit cuts under the progressive indexation formula if they opt for private accounts.

President Bush's plan for individual accounts allows workers to put 4 percentage points of their payroll tax (approximately 40 percent of the portion designated for the retirement portion of the program) into a private account, instead of paying it into the Social Security system. This money is effectively treated as a loan, given at a 3.0 percent real interest rate, which is paid back from the workers' guaranteed Social Security benefit.

The problem with President Bush's formula is that, due to the cuts from progressive indexation, the guaranteed Social Security benefits of high--income workers will not be large enough to repay the money that they owe the system. This would be the case for a maximum wage earner collecting benefits at age 65 beginning in 2060. At that point, the amount that a maximum wage earner owed to offset the money paid into a private account would exceed the size of their guaranteed benefit.

The size of this gap would rise through time, since the amount of money put into the private accounts (and implicitly "borrowed" from the Social Security system) would rise in step with wage growth, while the size of the Social Security benefit would be held constant for higher income workers under the progressive indexation formula. By the end of the projection period in 2080, a maximum wage earner who opted for a private account would owe the Social Security system $214,000 (in 2005 dollars) more than the value of their guaranteed Social Security benefit.

Since there has been no provision made for collecting the money owed by the highest wage earners, it is reasonable to assume that President Bush does not expect it to be paid. In other words, he is designing a system that will give the highest income wage earners a large and growing Social Security tax cut, as the share of wages placed in private accounts that is not subject to an offsetting cut in benefits continually increases through time. The resulting loss of revenue to the system will lead to considerably greater shortfalls than have been projected.[2]

Table 2 shows the cut in benefits in 2080 due to progressive indexation, assuming that no mechanism is put in place to reclaim the money owed by high wage earners who opt for private accounts. In this case, the cuts measured as a share of scheduled benefits are far larger for middle earners and high earners than for maximum earners. This is attributable

[2] The analysis of President Bush's plan by the Social Security Administration assumes that the money owed by workers who opt for private accounts is paid back into the Social Security system.

to the fact that maximum earners who take private accounts are able to avoid the impact of much of the scheduled cut, since their guaranteed Social Security benefit would be too small to reclaim all the money they owe. The benefit cut for a maximum earner in this situation would be equal to just 39.6 percent of their scheduled benefit. By comparison, the benefit cut for a medium wage earner would be equal to 35.4 percent of their scheduled benefit, while the cut for a high wage earner would be 49.9 percent of their scheduled benefit.

Table 2

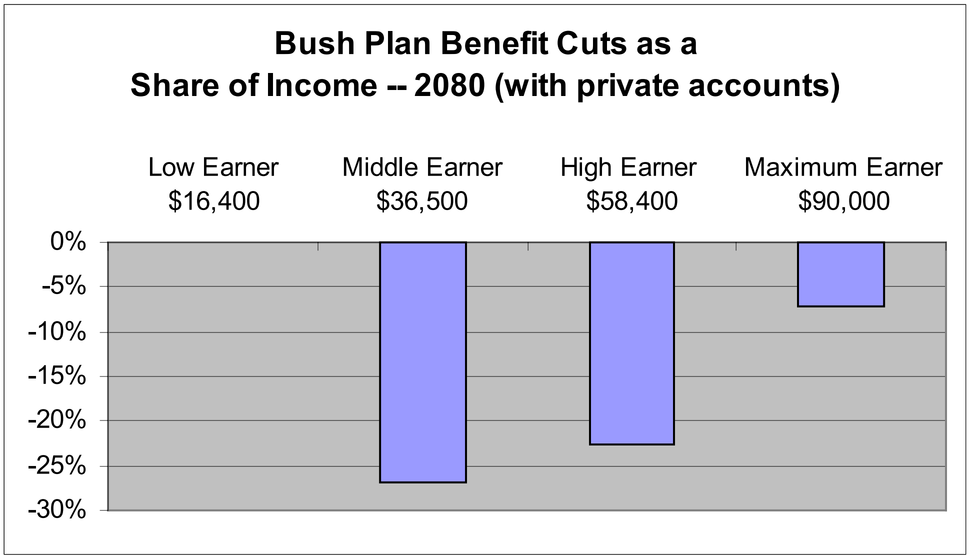
Benefit Cuts in 2080 for Workers With Private Accounts

	2080	
	Cut as Percent of Benefit	**Cut as Percent of Income**
Low Earner -16,400	0.0%	0.0%
Middle Earner - $36,500	40.2%	-26.9%
High Earner - $58,400	48.2%	-22.6%
Maximum Earner - $90,000	36.0%	-7.1%

Source: Author's Calculations, see appendix.

The impact of this pattern of benefit cuts appears even more regressive if the projected cut in benefits is taken as a share of beneficiaries' income, as shown in the last column of Table 2. While low earners are protected, the size of the benefit cut will be a much larger share of the income of middle--income retirees and high earners than it will be for maximum earners. Measured as a share of income, the benefit cut from progressive indexation for middle and higher earners will be more than three times as large as the cut for maximum earners. The relative size of these benefit cuts is also shown in Figure 4.

Figure 4



Source: Author's Calculations, see appendix.

Conclusion

President Bush's proposal for progressive indexation would put in place a structure of benefit cuts that would have the greatest impact on middle--income retirees. While the plan calls for protecting the lowest wage workers, middle wage earners would see cuts that grow through time, eventually reaching a level that is more than 35 percent of the scheduled benefit by the end of Social Security's planning period in 2080. Although the cuts projected for higher income wage earners will be a larger share of their projected benefits, this is likely to be of much less consequence to these workers, because Social Security is a much smaller share of their retirement income.

When progressive indexation is coupled with the system of private accounts proposed by President Bush, the system appears even more regressive. President Bush's proposal treats the money in the private accounts as a loan that will be paid back from the guaranteed Social Security benefit. However, with progressive indexation, the guaranteed Social Security benefit will not be large enough to repay the money owed by the highest income earners. In effect, by cutting the benefit for the highest income earners with private accounts, progressive indexation simply cuts the amount of money that Social Security is repaid. In this case, middle and high wage earners will not only lose a much larger share of their retirement income with progressive indexation than the highest income workers, they will also lose a much larger share of their Social Security benefit.

In short, progressive indexation is a regressive way to cut Social Security benefits, if the criterion is the percentage reduction in retirement income. While the lowest wage earners would be protected, middle--income earners would see by far the largest reduction in their retirement income under this plan. If progressive indexation is accompanied by a system of private accounts comparable to that proposed by President Bush, then it is even more regressive. Under this system, middle--income workers would not only lose a larger share of their retirement income than the highest income workers, they would also lose a larger share of their Social Security benefits.

Appendix

The average income for households in the second, third, and fourth quintiles is assumed to be the half way point between the cutoffs for these quintiles, as given in Table 7.5 of *Income of the Population 55 or Older, 2002* (Social Security Administration, 2005 [http://www.ssa.gov/policy/docs/statcomps/income_pop55/2002/sect7.html]). These cutoffs in 2002 were $9,721, $15,181, $23,880, and $40,982. The average income of the bottom quintile is assumed to be 80 percent of the income cutoff for this quintile, or $7,777 in 2002.

The average income for the top quintile is calculated by taking the Census Bureau's estimate for the overall average income for all households over age 65, $34,415 in 2002 (Historical Income Tables –Households, Table H-10 [http://www.census.gov/hhes/income/histinc/h10ar.html]), and multiplying by the number of households over age 65 (26,220,000 in 2002, as indicated in Table 7.5) and then subtracting the income for the bottom four quintiles, as calculated above. This calculation implied an averaged income of $99,890 for households in the top quintile in 2002.

Appendix Table 1 shows the share of Social Security in total income, by income quintile for households over age 65.

Appendix Table 1

Quintile	Social Security as a share of income
First	82.6%
Second	84.1%
Third	67.0%
Fourth	47.0%
Fifth	19.8%

Source: Social Security Administration.

This analysis assumes that middle earners fall in the third income quintile that high earners fall in the fourth income quintile and that maximum earners fall in the fifth income quintiles. This means, for example, that the analysis assumes that for maximum wage earners, Social Security will on average account for 19.8 percent of their income in retirement, if the benefit formula is not changed.

This analysis also assumes that the share of retirement income attributable to Social Security will not change, if the benefit structure is left in place. While there are many reasons for believing that this will not be the case (most obviously that declining pension coverage may leave many middle income workers more dependent on Social Security in the future), assuming that the current income pattern persists through the 75-year planning period is the simplest possible assumption.

All the calculations for benefit cuts are based on the CBO projections for wage and benefit growth. It is assumed that the index formula is set so that the real value of the benefit for maximum wage earners is frozen at its 2015 level. The calculations assume that workers who earn less than $22,500 in 2005 continue to have their benefits indexed to wage growth (this cutoff is also indexed to wage growth. The indexation factors for income above the old second and third bend points are then adjusted to keep the benefit of a maximum wage earner held constant at the 2015 level. These adjusted indexation factors are then used to calculate benefits for middle and high wage earners.

The calculations in Table 2, which show the amount of money that would be needed to offset the money placed in private accounts was calculated by using the projections from the Center for Economic and Policy Research's Accurate Benefit Calculator [http://www.cepr.net/calculator/calculator.html]. The calculator projects the size of the benefit cut under the Bush Plan that would be needed to offset the money placed in private accounts.