Accurate Benefits Calculator (ABC) Demonstration

To fully understand how the Accurate Benefits Calculator (ABC) can be used, it is useful to see it applied to concrete examples. This sheet applies the ABC to the hypothetical examples of Michael, a young adult, 18 years old, just entering the job market, and Sue, a 35 year-old single mother.

Michael

Our young worker, Michael, is 18 years old. He plans to get married eventually to a working professional and also to take a couple years off work at age 28 to further his education. He expects to earn an average wage and anticipates that he will retire at 67, the normal age for his cohort.

Now the ABC can be implemented to compare how he would fare in retirement under current law to what he would get under President Bush's plan[1], using projections from the nonpartisan Congressional Budget Office.

Begin by selecting "Unmarried" (because Michael's wife is a working professional who expects to make more than 1/3 of his salary making it more accurate to calculate their benefits separately); entering his birth year (1987); and indicating how many years he estimates he will take off (in this case, two years for graduate school). Next the retirement age and average wage for his lifetime are entered. In Michael's case, it's 67 years and $39,383.50.

We will skip the next three advanced inputs, and come back to them later (see "Playing with Stock Returns and Fees" below).

The ABC then calculates the results. First, it tells us that the current system is scheduled to provide $2,323.90 a month to Michael upon retirement. In the highly unlikely event that Congress did nothing to shore up the system between now and 2052, when the Congressional Budget Office (CBO) projects Social Security would run a shortfall, Michael would get $1,766.79 a month.

Even under the shortfall, the ABC shows that this is more than he could expect under the Bush proposal. If he chose not to take a private account, Michael could expect to get a guaranteed benefit of $1,419.69 a month (a 38.9 percent cut from currently scheduled benefits). If he *did* deposit the maximum allowable amount into a private account, Michael's guaranteed benefit would fall to $452.88 a month, since he must repay the government, with interest, for the Social Security taxes diverted to the private account. Using stock projections derived from the CBO's economic projections, Michael could possibly make back enough in his account to earn $1,451.98 a month.

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[1] These assumptions, unless otherwise noted, are from the President's Commission to Strengthen Social Security (Reform Plan No. 2), and from the additional information offered by the White House in conjunction with President Bush's 2005 State of the Union Address.

What Michael Can Expect …
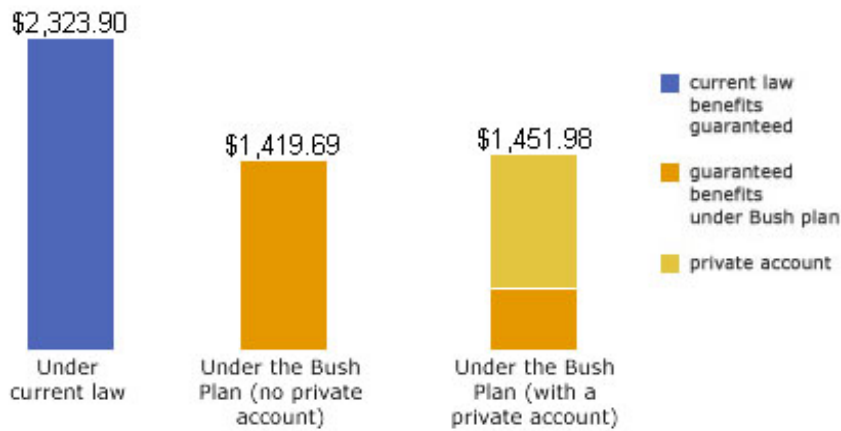
More Advanced Outputs:

The ABC also tells us what is the maximum bequest Michael could leave behind, *if he chose to receive poverty-level benefits* (which would be the minimum benefit the President's plan would require a retiree to attain with their private account). If Michael opted to take a small, minimum benefit of $772.97 a month, he could possibly keep $126,296.53 in a private account to pass on. (It is important to point out, however, that if Michael got his currently scheduled benefit, and chose to set aside all but $772.97 each month at 3 percent interest, he could amass a much more substantial bequest of $274,053.77 over the course of an average 20-year retirement.)

Next, the calculator tells us the value of the personal account Michael could have under the President's plan, *before deducting any fees:* $198,077.97. This amount is then offset by the cost of full annuitization of that account (to match the type of benefit paid by the current Social Security system) and the loss due to a "claw back" -- reducing the guaranteed benefit by the amount necessary to repay the government, with interest, for the funds that went into the private account. In this case the claw back takes $170,833.92, or 86.2 percent of the private account. Thus, we see that Michael would get an additional $5,705.35 from his private account (compared to the President's plan without an account).

Playing with Stock Returns and Fees:

To understand the final part of the calculator, let's return to those advanced inputs that we skipped earlier.

The basic assumption underlying stock returns in the ABC is that such returns must be consistent with other economic assumptions made by the CBO in making projections for Social Security. The stock returns forming the default of this calculator, around 4.35

percent above inflation, are consistent with those economic growth projections and a constant price-to-earnings ratio for stocks. That ratio currently stands at 21, which is high by historical standards. This calculator allows users to bump those stock returns up, but, as this calculator demonstrates, that may lead to unrealistic price-to-earnings ratios; unrealistically high price-to-earnings ratios indicate that the returns entered by the user are highly improbable to occur.

To increase the stock returns, go to the line that says, "Stock Premium Over Normal Return: _0.0_ percentage points. So, if we want to see results for a stock return one-percentage point above the default (or 5.35 percent), we enter _1.0_ percentage points.

After updating the table with this new assumption, the private account will do somewhat better. However, down below, the price-to-earnings ratio, which formerly was constant at 21.0, shoots up to 96.8 by 2080, clearly an implausible occurrence.

Advanced users can also change the fees, but should note that the default 3 percent for administrative fees was assumed by Reform Plan #2 presented by President Bush's Social Security Commission, and is almost certainly a low figure.

The cost of annuitization used as a default is a conservative estimate, though higher than what CBO assumes.[2] However, users can change this assumption to see the impact on expected outcomes from the private account.

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[2] Private insurers charge an amount equal to 15 to 20 percent of an account's value to convert a stock of money into a lifelong stream of income, known as an annuity. Research has indicated that 5-10 percentage points of this charge is attributable the administrative costs associated with this transaction. Another 5-10 percentage points is due to the problem of adverse selection – the people who choose to buy annuities are likely to have longer life expectancies than the average person. Therefore, the private insurer has to be sure that it charges accountholders enough to cover the costs of paying them. CBO does not take adverse selection into account.

Sue
Recently divorced, Sue has joint custody of her two children and works full time. She is 35 years old (born in 1970) and took four years off from her job as an office nurse, returning to work when her children entered pre-school. As a woman working in the health care field, she has made and expects to make an average lifetime wage of $29,790.60 (86.1 percent of the national average). Sue hopes to retire by the age of 65 and does not plan to marry again.

When plugging in her data into the ABC, we find that she, like Michael, would get a lower benefit under the President's proposal, whether or not she decided to take a private account.

What Sue Can Expect …
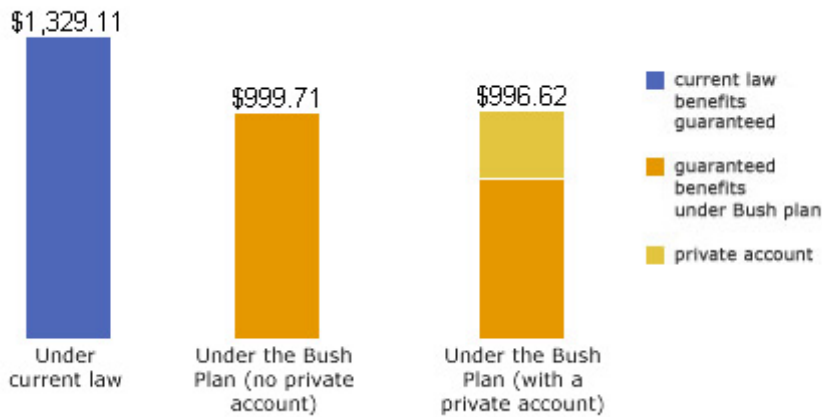
For Sue, there is no difference between her scheduled benefit under current law and what CBO says Social Security will be able to pay her. Sue can expect to get $1,329.11 a month, replacing 36.6 percent of her income at work. On the other hand, under the Bush plan, Sue can expect to see a benefit cut of about 28 percent.

Taking a private account would not make up for this benefit cut, since she would have to pay back the government for the money she diverted from payroll. In Sue's case, this additional cut takes away 86.8 percent of the value of her private account. She would lose the rest of the value of the account to fees under the ABC defaults. Even if we assumed zero fees, however, Sue's private account would not make up for the initial benefit cut.