Analysis of the 2010 Social Security Trustees Report
August 6, 2010

Yesterday, the Social Security and Medicare Trustees released their 2010 report on the financial status of both programs. Both programs remain on unsustainable paths.

This paper will focus on the Social Security Trustees report and projections, and options for reform. Next week, we will release an analysis of the Medicare report. CRFB will also be publishing a Social Security blog series on *The Bottom Line* over the coming week (which can be found at http://crfb.org/category/blog-issue-areas/social-security-blog-series) leading up to Social Security's 75th anniversary on August 14th.

Social Security Projections

According to the Trustees report, Social Security will run a cash flow deficit of $41 billion (0.3 percent of GDP) this year, will return to small surpluses in 2012-2014 of a few billion dollars a year, and then will begin running increasing deficits from 2015 onward. By 2020, the system will run a cash flow deficit of over $100 billion (0.4 percent of GDP) and by 2030 it will have a shortfall of nearly $460 billion (1.2 percent of GDP).

Fig. 1: Social Security Revenues and Costs (percent of taxable payroll)

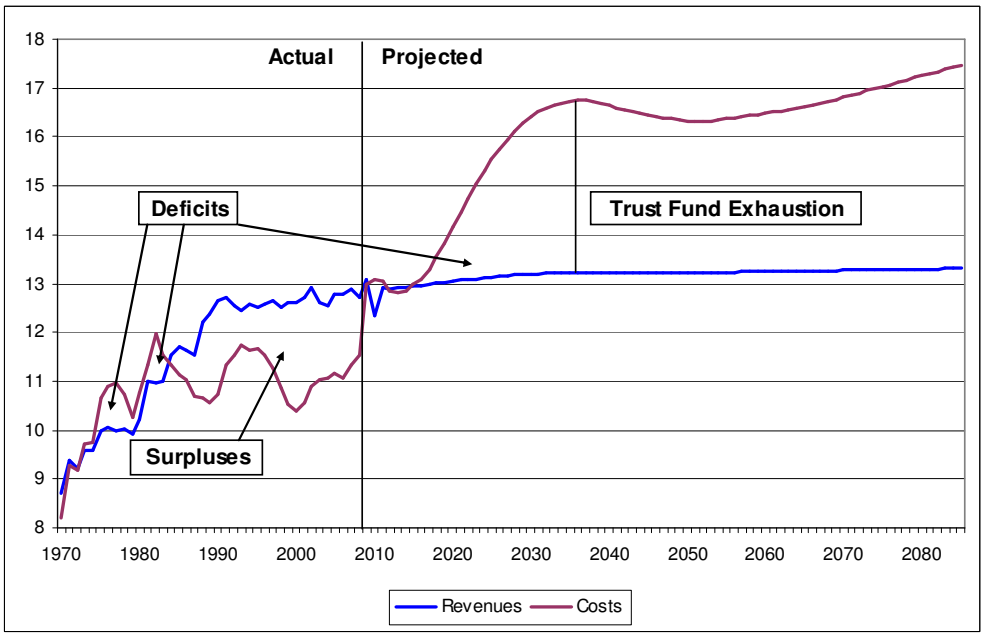


Fig. 2: Current and Projected Social Security Cash Flow Deficits

	2010	2020	2030	2040	2050	2060	2070	2080	75-Year Shortfall
% of GDP	-0.3%	-0.4%	-1.2%	-1.3%	-1.1%	-1.2%	-1.2%	-1.4%	-0.7%*
% of Taxable Payroll	-0.8%	-1.1%	-3.2%	-3.4%	-3.1%	-3.2%	-3.5%	-4.0%	-1.9%
Billions of Current $	-$41	-$101	-$457	-$758	-$1,073	-$1,726	-$2,909	-$5,006	$5,400^

*CRFB estimate.
^ Present-value estimate of the 75-year unfunded obligation.

In the short-term, the health of the Social Security program deteriorated compared to last year's estimates, due to worse economic conditions. Over the longer-term, it improved somewhat, due to the effects of higher tax revenues resulting from more compensation in the form of cash wages as opposed to heath care benefits, resulting from health care reform.

Due mainly to aging and an expanding retired population, costs are expected to increase from 4.8 percent of GDP today to 6.1 percent of GDP by 2030. These costs are generally in line with last year's projections of 4.9 percent of GDP this year to 6.1 percent by 2030. Meanwhile, revenues are expected to be slightly higher than last year's projections, rising from 4.6 percent of GDP today, to 4.9 percent by 2020, and stabilizing at around that level through the 2030s before dropping down to 4.6 percent by 2080.

Over the next 75 years, on top of the $2.5 trillion in government bonds which are currently in the Social Security Trust Funds and which must eventually be repaid, the program still faces an average shortfall of 1.92 percent of taxable payroll—below last year's projected 2 percent shortfall, but a significant imbalance nonetheless.

Fig. 3: Social Security Short-Range Surpluses and Deficits (billions)

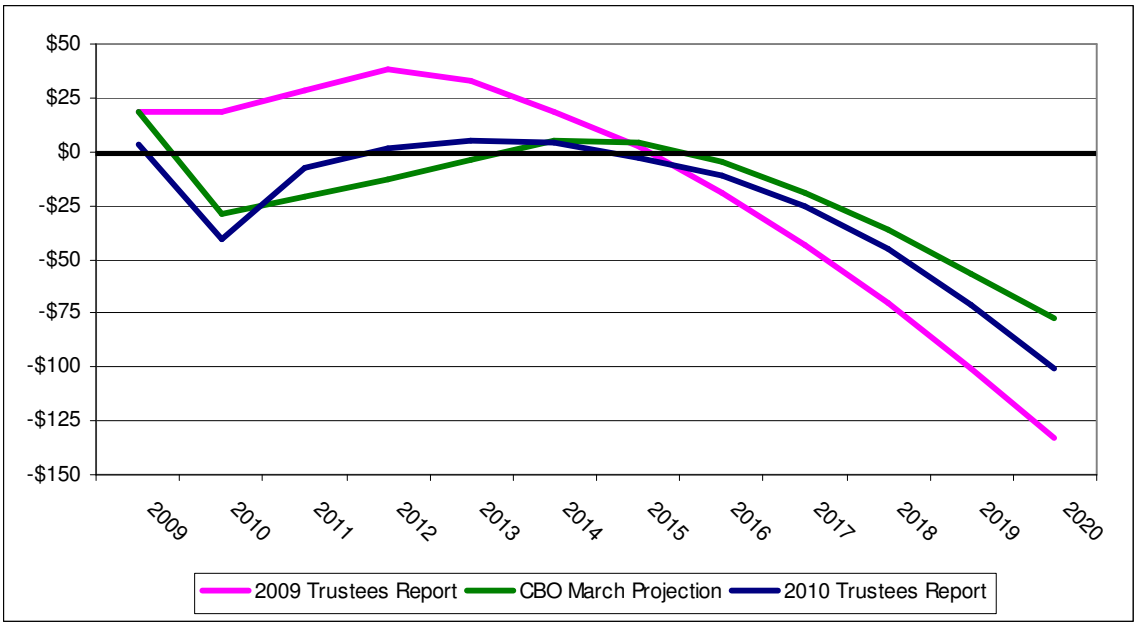
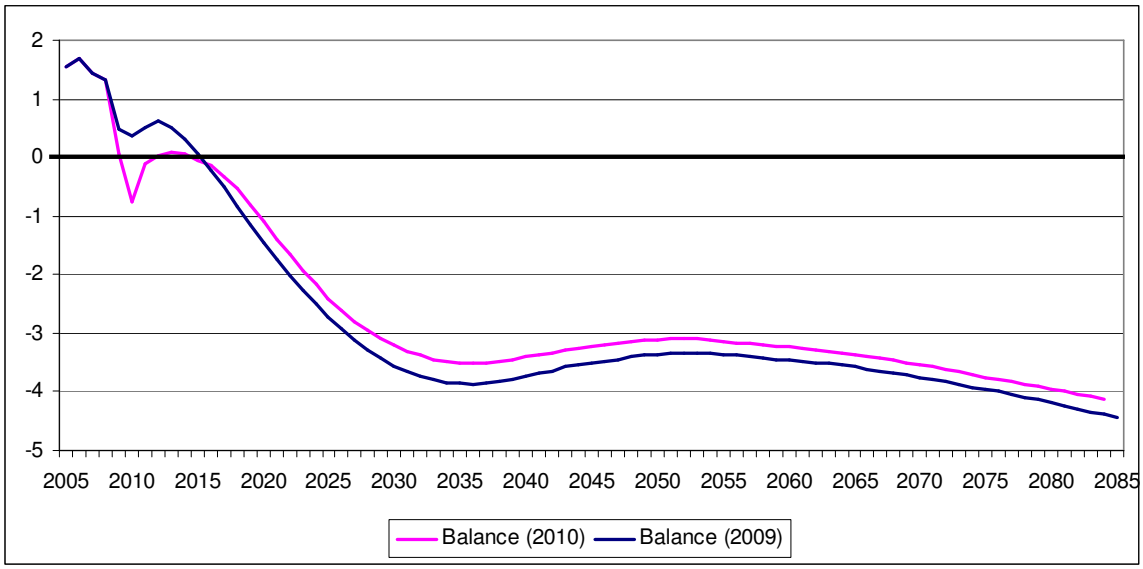


Fig. 4: Social Security Long-Term Surpluses and Deficits (percent of taxable payroll)



Reforming Social Security

The Committee for a Responsible Federal Budget has compiled a backgrounder on Social Security reform (found in Appendix 1) and a list of reform options from CBO that could help strengthen the program (found in Appendix 2). We have also put together a chart of the main elements included in past reform plans (found in Appendix 3).

Tackling Social Security reform now will give policymakers more options to improve the program's solvency, since many potential reforms take time to phase-in, along with giving beneficiaries more time to adjust to any changes. Acting now would also signal to markets and our creditors that we are committed to controlling the growth of U.S. debt.

Appendix 1: Background on Social Security Reform

Social Security is the government's single largest program, and is projected to grow significantly in the coming decade due mainly to population aging. As a result, the small programmatic deficits, which began this year, will continue to grow from 2015 onward. By 2035, they will reach 3.5 percent of payroll – and will have nearly exhausted the Trust Funds. If full benefits were allowed to continue after Trust Fund exhaustion, that gap would exceed 4 percent of payroll by the end of the 75-year window – which is the equivalent of about $220 billion dollars a year in today's terms.

Not only do the Social Security imbalances reflect a programmatic solvency problem, the growth in the program puts significant pressure on the rest of the budget. Over the next couple of decades, the program is expected to grow from 4.8 percent of GDP today to nearly 6.1 percent in 2030, contributing to overall federal government spending growth. Though Medicare and Medicaid are likely to grow faster, Social Security's growth nonetheless represents a serious fiscal challenge, and Social Security reform can play an important part in bringing our debt down to sustainable levels.

Social Security Basics

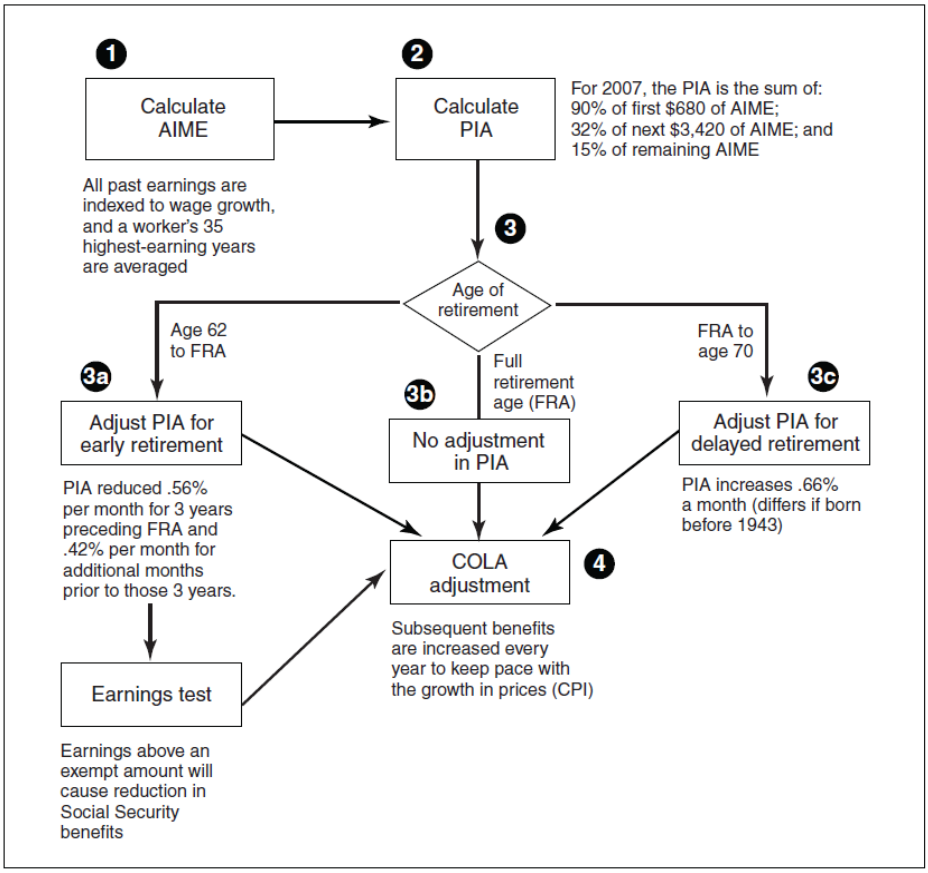
The Old Age, Survivors, and Disability Insurance (OASDI) program commonly known as "Social Security" currently offers benefits to about 53 million people. While about two thirds of those beneficiaries are receiving old-age benefits, about one-fifth are disabled workers and another one-seventh are widow(er)s or other survivors.

Benefits are designed to be earnings-related, but progressive. In other words, higher earners receive larger benefits in dollar terms, but smaller benefits as a percent of their income. The flow chart below illustrates how normal retirement benefits are calculated.

The average benefit for a retired or disabled worker is about $14,000 a year, although this number would be significantly higher if so many retirees didn't collect early retirement benefits (which pay lower benefits on an annual basis to account for more years of collection).

Social Security is funded on a "pay-as-you-go" basis, which means that tax dollars from current workers pay for benefits for current retirees. As the population gets older, though, the worker-to-retiree ratio goes down and affording scheduled benefits becomes harder. Failing to adjust tax or benefit levels will lead to deficits, and eventually cause the trust funds to run out of money at which point there would be a sudden 25 to 30 percent drop in benefits.

Fig. A1: How Social Security Benefits Are Calculated



Source: GAO.

Reform Considerations

In thinking about what a reform plan should look like, one must think about a number of considerations. Though these can be endless, six major ones standout:

Solvency – Social Security is currently insolvent over the long-run. The Trustees estimate that the combination of existing trust fund assets and projected revenues will be insufficient to pay all benefits beyond 2037. The 75-year shortfall is equivalent to 1.92 percent of taxable payroll. In effect, that means to ensure solvency we would need to immediately increase taxes or cut benefit by roughly that amount.

Sustainability – Unfortunately, solvency isn't enough. Social Security's shortfall is growing over time, meaning that while an immediate 1.84 [1] percentage point tax hike (or equivalent sized spending cut) might make Social Security solvent through 2085, it would leave a large gap between future revenues and spending. A sustainable plan goes

[1] This number is different than the 1.92 actuarial imbalance because it does not assume that any trust fund reserves would be present at the end of the period and it takes into account changes in compensation that would result from the tax change.

beyond closing the actuarial short-fall, and ensures that the program is in balance or that surpluses are not shrinking at the end of the solvency window.

Cash Flow Deficits – The term cash flow simply refers to the difference between how much the Social Security program brings in from payroll taxes, not including interest, and how much it spends. While many are concerned with the health of the trust funds, we should be equally, if not more, concerned with the cash flow balance. This balance tells us the net cost of the Social Security program on society (after accounting for the payroll tax). While the Social Security trust funds commit a certain level of resources to the program, they do nothing to make paying that obligation easier, and the gap between revenues and spending reflects the pressure on the rest of the budget. Though more difficult than achieving solvency or sustainability, striving to keep the two sides of the program in balance is the most fiscally responsible objective.

Benefit Levels – Though Social Security benefits are growing from generation to generation at roughly the rate of wage growth, they are not particularly large. Social Security is meant to be one of three components of retirement income, along with private savings and pensions. For many, however, it is their primary source of income. In deciding appropriate benefit levels, many policymakers aim to look at both **adequacy** – the extent to which benefits are sufficient to provide a floor of income, and **equity** – the extent to which benefit levels are based upon contributions. Ideals on the relative importance of adequacy and equity can factor into decisions on how steep benefit cuts can be and where these cuts should be focused.

Tax Rates – Currently, workers contribute 12.4 percent of their income (half technically comes from the employer), up to $106,800 of income. The payroll tax is the largest tax paid by most households and has large effects on labor market incentives. Those who prefer not to cut benefits significantly must instead consider raising additional revenue, and should consider the economic and distributional consequences of such changes.

Economic Impact – The United States is beginning to suffer the consequences of an aging population. As the Baby Boomers retire and life expectancy continues to grow, population aging threatens not only to drive up the cost of Social Security, but Medicare and Medicaid as well. Meanwhile, population aging will shrink the relative size of the labor force, which means slower revenue and economic growth. Population aging will also tend to worsen the low savings rates the country already experiences. When both the public and the government are net borrowers it can lead to significant underinvestment and subsequently slow economic growth. Social Security reform should be thought of in the context of these economic issues, and it would be wise to design reform in a way to mitigate, or at least not worsen, these economic trends.

Reform Levers

Though there are a number ways to bring the Social Security system back into balance, there are seven main "levers" for making changes in the current system:

Retirement Ages – Currently individuals are eligible to retire at age 62, and receive full benefits at age 66 (headed to 67). Either of these ages could be increased; however, only increases in the full retirement age would improve solvency. (Though it would not affect solvency, raising the early retirement age would likely result in overall economic and fiscal improvements).

Computation Years – Currently, initial benefits are calculated based on a wage-adjusted average of an individual's 35 highest earning years. Increasing that number of years in the calculation would tend to reduce benefit levels, and could offer some positive work incentives.

"PIA" Formula – After one's wage-adjusted average earnings are computed, benefits are calculated based on a progressive formula that offers **90 percent** of the first $9,100 of earnings, **32 percent** of the next $45,900, and **15 percent** of any remaining income. Those factors could be reduced in any number of ways. Many plans concerned with progressivity have split the 32 percent bracket in two and then focused reduction on the upper one (as well as the 15 percent bracket).

Price Indexing – A special PIA formula change would constantly adjust the rates downward in order to make it so initial benefits grow with prices, rather than wages. An alternative is "progressive price indexing," where high earners see initial benefits grow with prices, lower-earner benefits continue to grow with wages, and benefits in between are subject to a hybrid formula.

COLAs – Upon receiving initial benefits, beneficiaries receive annual "cost of living adjustments" based on a measure of inflation known as the 'CPI-U'. These COLAs could be reduced explicitly, either across the board or for high earners. Similarly, benefits could be updated through something called the "chained-CPI," which is considered a more accurate measure of inflation, and is somewhat lower than the regular CPI.

Tax Rates – Currently, employers and employees each pay a 6.2 percent payroll tax (though for most workers, the employer portion is passed onto employees.) This rate could be increased across the board, only on one side, or only on certain income levels.

Tax Base – The payroll tax currently applies to $106,800 (indexed to average wage growth) – which captures about 83 percent of wages in a typical year, but more this year as a result of economic volatility. The tax applies only to wage-income, excluding earnings from investment and non-cash compensation such as health insurance. Changes can be made either to the types of income subject to the tax or to the taxable

maximum. Expansions of the tax base could either be accompanied by larger benefits or not. A related proposal would create a smaller "payroll surtax" somewhere above the taxable maximum.

Other Changes – In addition to the levers above, many other options exist and can be an important part of a reform plan. Among them include: private accounts (either add-on or carve outs); changes to disability, dependent, survivor, spousal, and other auxiliary benefits; incentives (within and outside of Social Security) for working longer; expansion of the system to certain exempt workers; taxation of benefits; means-testing of benefits; and benefit protections/enhancement for poorer or older retirees.

Appendix 2: Social Security Reform Options

Policy Option	Percent of 75-Year Gap Closed	Percent of Deficit Closed in 2080	Description
Increase the Payroll Tax Rate by 1% in 2012	63%	31%	Social Security is currently financed by a 12.4% payroll tax. This rate could be increased gradually or immediately.
Increase the Payroll Tax Rate by 2% over 20 years	100%	62%	
Increase the Payroll Tax Rate by 3% over 60 years	88%	85%	
Eliminate the Taxable Maximum	106%^	31%	The payroll tax is applied to the first $106,800 of wages (adjusted for wage inflation). All income above that amount is untaxed. Raising or eliminating this "taxable maximum" would bring new revenues into the system. Additional benefits that take this increase into account could be provided or not.
Raise the Taxable Maximum to Cover 90% of Earnings	35%^	15%	
Eliminate the Taxable Maximum; Do Not Provide Additional Benefits	156%^	69%	
Tax Covered Earnings up to $250,000; No Additional Benefits	87%^	46%	
Tax All Earnings Above Taxable Maximum at 4%; No Additional Benefits	52%^	23%	Instead of raising the taxable maximum, some proposals would apply a smaller surtax on high earners. Such a tax could apply to all earnings above the threshold, or above some higher threshold. Additional benefits that take this new tax into account could be provided or not.
Tax All Earnings $250,000 at 4%; No Additional Benefits	17%^	8%	
Raise to 38 the Years of Earnings Included in the AIME	13%	8%	Benefits are calculated based on a worker's top 35 earning years. Increasing that amount would reduce benefits by including lower or zero earning years.
Index Initial Benefits to Changes in Longevity	38%	46%	Instead of raising the retirement age, benefits could be indexed downward to account for changes in life expectancy.
Introduce a New Poverty-Related Minimum Benefit	-8%	0%	In order to protect the most vulnerable retirees, Social Security could be modified to enhance benefits for low earners.

Policy Option	Percent of 75-Year Gap Closed	Percent of Deficit Closed in 2080	Description
Reduce All PIA Factors by 15% in 2017	94%	62%	Social Security benefits are calculated based on past earnings, but with a three-tier progressive formula. Any or all of those tiers could be altered.
Reduce the Top Two PIA Factors by One-Third in 2017	125%	85%	
Reduce the Top PIA Factor by One-Third in 2017	13%	8%	
Reduce All PIA Factors by 0.5% Annually in 2017	75%	92%	
Reduce PIA Factors to Index Initial Benefits to Prices Rather Than Earnings (Pure Price Indexing)	169%	200%	Benefits are calculated based on past wages, which are updated to account for wage growth. As a result, initial benefits tend to grow with the economy over time. Price indexing would adjust the benefit formula so that initial benefits only grew with prices. Progressive price indexing would protect lower earners from these changes, and subject middle-earners to a hybrid formula.
Progressive Price Indexing, Protecting Bottom 30% of Earners	88%	108%	
Progressive Price Indexing, Protecting Bottom 50% of Earners	69%	77%	
Raise the NRA to 68	25%	15%	Under current law, the normal retirement age (NRA) has increase to 66 and is scheduled to increase to 67. This increase could be accelerated, or the NRA could be increased further to account for growing life expectancy.
Raise the NRA to 70	56%	46%	
Index NRA to Changes in Longevity	31%	38%	
Reduce COLAs by 0.5 Percentage Points	50%	31%	Social Security benefits are updated every year through a Cost of Living Adjustment (COLA) based on the Consumer Price Index (CPI). Some experts believe the CPI that is used overstates inflation.
Base COLAs on Chained (Superlative) CPI	31%	15%	

Source: Congressional Budget Office.

^At the time of these estimates, CBO chose not to provide estimates for the 75-year shortfall as a percent of taxable payroll, given that the Social Security Administration had not updated its projections since May 2009. These estimates are based on CRFB calculations of CBO's estimated impact as a percent of GDP for each policy, using a rough multiplier to convert to taxable payroll, and significant rounding errors may exist.

*Note that private accounts can take a number of forms and magnitudes. These estimates constitute only one specific private accounts proposal.

Appendix 3: Social Security Reform Plans

Table of Major Options within Featured Social Security Plans

Major Proposals	Ryan Plan	Diamond-Orszag Plan	Kolbe-Boyd Plan	Graham Plan	Liebman-MacGuineas-Samwick Plan
Increase the Retirement Age	X		x		x
Reduce and/or Reform PIA Rates		X	x	X	x
Progressive Price Indexing	x				
Increase Early Retirement Penalties			x		
Reduce the COLA			x		
Adjust Benefit Formula for Life Expectancy		X	x		
Increase Benefit Computation Period			x		
Limit Spousal Benefits			x		
Increase Payroll Tax Rate		X		x	
Raise Taxable Maximum		X			x
Broaden Tax Base	x	X			
Index Income Tax Code to Chained-CPI			x		
Low-Earner Benefit Enhancement or Minimum Benefit Provision	x	X	x	x	
Adjust Benefits for Widow(er)s		X	x	x	
Create Personal Accounts	x		x	x	x
Transfer Funds into System	x		x	x	