UNDERSTANDING SOCIAL SECURITY'S SOLVENCY CHALLENGE

HEARING

BEFORE THE

SUBCOMMITTEE ON SOCIAL SECURITY

OF THE

COMMITTEE ON WAYS AND MEANS

U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED FOURTEENTH CONGRESS

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UNDERSTANDING SOCIAL SECURITY'S SOLVENCY CHALLENGE

WEDNESDAY, SEPTEMBER 21, 2016

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON WAYS AND MEANS,
SUBCOMMITTEE ON SOCIAL SECURITY,
Washington, DC.

The Subcommittee met, pursuant to call, at 10:05 a.m., in Room B–318 Rayburn House Office Building, the Honorable Sam Johnson [Chairman of the Subcommittee] presiding.

[The advisory announcing the hearing follows:]

WAYS AND MEANS
CHAIRMAN KEVIN BRADY

Chairman Johnson Announces Hearing on Understanding Social Security's Solvency Challenge

House Ways and Means Social Security Subcommittee Chairman Sam Johnson (R-TX) announced today that the Subcommittee will hold a hearing on "Understanding Social Security's Solvency Challenge." The hearing will focus on the difference between the Social Security solvency projections of the Congressional Budget Office and the Social Security Board of Trustees, the causes of the difference, and what this means for Social Security's long-term solvency. **The hearing will take place on Wednesday, September 21, 2016 in B-318 Rayburn House Office Building, beginning at 10:00 AM.**

In view of the limited time to hear witnesses, oral testimony at this hearing will be from invited witnesses only. However, any individual or organization may submit a written statement for consideration by the Committee and for inclusion in the printed record of the hearing.

DETAILS FOR SUBMISSION OF WRITTEN COMMENTS:

Please Note: Any person(s) and/or organization(s) wishing to submit written comments for the hearing record must follow the appropriate link on the hearing page of the Committee website and complete the informational forms. From the Committee homepage, http://waysandmeans.house.gov, select "Hearings." Select the hearing for which you would like to make a submission, and click on the link entitled, "Click here to provide a submission for the record." Once you have followed the online instructions, submit all requested information. ATTACH your submission as a Word document, in compliance with the formatting requirements listed below, **by the close of business on Wednesday, October 5, 2016**. For questions, or if you encounter technical problems, please call (202) 225-3625.

FORMATTING REQUIREMENTS:

The Committee relies on electronic submissions for printing the official hearing record. As always, submissions will be included in the record according to the discretion of the Committee. The Committee will not alter the content of your submission, but we reserve the right to format it according to our guidelines. Any submission provided to the Committee by a witness, any materials submitted for the printed record, and any written comments in response to a request for written comments must conform to the guidelines listed below. Any submission not in

compliance with these guidelines will not be printed, but will be maintained in the Committee files for review and use by the Committee.

All submissions and supplementary materials must be submitted in a single document via email, provided in Word format and must not exceed a total of 10 pages. Witnesses and submitters are advised that the Committee relies on electronic submissions for printing the official hearing record.

All submissions must include a list of all clients, persons and/or organizations on whose behalf the witness appears. The name, company, address, telephone, and fax numbers of each witness must be included in the body of the email. Please exclude any personal identifiable information in the attached submission.

Failure to follow the formatting requirements may result in the exclusion of a submission. All submissions for the record are final.

The Committee seeks to make its facilities accessible to persons with disabilities. If you are in need of special accommodations, please call 202-225-1721 or 202-226-3411 TTD/TTY in advance of the event (four business days notice is requested). Questions with regard to special accommodation needs in general (including availability of Committee materials in alternative formats) may be directed to the Committee as noted above.

Note: All Committee advisories and news releases are available at http://www.waysandmeans.house.gov/

Chairman JOHNSON. Well, good morning and welcome to today's hearing on the difference between the Congressional Budget Office and the Social Security Trustees' projections of Social Security solvency.

Are you guys ready for some assault? [Laughter]

We all know how important Social Security is to the millions of Americans who rely on it, but Social Security is in trouble. And the longer we wait, the tougher it becomes to fix it. It is up to Congress to make the tough choices based on the best, most accurate information we can find and is available.

As Chairman of the Social Security Subcommittee, I take this responsibility seriously, and I am committed to making sure our children and our grandchildren can count on Social Security just like seniors and individuals with disabilities do today.

Nearly every year, we hold a hearing on the latest Social Security Trustees' projections to learn the latest about the challenges Social Security faces. But the Trustees aren't the only ones that look at Social Security's long-term finances, the Congressional Budget Office does too and so do the Dems, especially my friend.

Both CBO and the Trustees have been looking at Social Security's finances for decades, and as you can see on the screens today, the Trustees and CBO paint a very different picture of just how much trouble Social Security is in. But it hasn't always been that way, and just a few years ago, when CBO was still using many of the same assumptions as the Trustees, the estimates were fairly similar.

Today, CBO and the Trustees look at the same historical data but use different approaches to make different assumptions about the future, and those differences have a real impact. CBO and the Trustees don't agree on whether Social Security's finances got bet-

ter or worse this year. They also don't agree on when Social Security's trust funds will be exhausted.

Last year, their estimates of Social Security's shortfall were over 60 percent apart. Now, they are over 75 percent apart. That is why, earlier this year, Chairman Brady and I asked CBO and Social Security's Chief Actuary to take a look at each other's projections and help us understand how they can come to such different views of Social Security's future.

Today, I hope you are going to tell us what you learned. With CBO and the Trustees so far apart, it is hard to know if a Social Security plan will actually make the program solvent. While a plan may be solvent, according to the Trustees, it might not even get close, if you ask CBO.

I know we have all looked at ideas on ways to fix Social Security, and while we may not agree on the best way to do it, we should at least agree that we need an accurate as possible picture of Social Security's financial health. Americans want, need, and deserve to be able to count on Social Security, and it is up to us and the Congress to make the changes so they can.

We count on the experts like CBO and the Trustees to help us figure out how best to do that, and we appreciate what you all do. So this hearing is about understanding why these two well-respected organizations have come to very different conclusions on just how much trouble Social Security is in. I look forward to hearing from our witnesses, and I am sure the rest of us do too.

And I now recognize Mr. Becerra for his opening statement.

Mr. BECERRA. Mr. Chairman, first, great to see you back and look forward to having you finish up this year and come back ready to go again as well, and so thank you for holding this hearing. I thank our two witnesses for being here and am pleased that we are having another conversation about Social Security.

Probably the most important thing we should start off by doing is comparing the facts that we know versus the projections, which are speculation based on the experts' best guesses of what we know from the data, the data that is from the past and what we are collecting today. But what we do know is what has happened in the past and where we are today, so here are some facts.

Social Security has paid earned benefits to American workers, tens of millions of them, on time and in full for over three-quarters of a century. On time, in full, for over three-quarters of a decade. I have a chart that you can see now. Social Security currently has a $2.8 trillion surplus in its trust fund. That exists only because American workers have made tax contributions into the system and into the fund, and it is very simple math. You put taxpayer dollars in, and then they are drawn out, and you can see what has been drawn out. It is less than what has been put in.

At the same time, those of us who have savings accounts know the beauty and the magic of compound interest, and because those funds that the trust fund has held earn interest, even though it is small interest, low interest, it has earned interest, over a trillion dollars in interest, and so, as a result, we have a $2.8 trillion surplus today in Social Security to help cover the benefits of future retirees and future recipients of Social Security benefits.

That is not to say that Social Security doesn't face a challenge into the future as that surplus is consumed. I think we all understand that, and that is why we all, I think, bipartisanly, know we want to try to tackle this together. But Social Security in those 81 years or so has weathered 13 recessions. It has, as I said, paid in full and on time at all times and meanwhile has been able to accrue a $2.8 trillion surplus dedicated to the future needs of those workers.

What other program, private or public, can say this? There isn't a one. No other program that serves tens of millions of Americans can say it has that kind of a track record.

So now the projections. And let's recognize again: these are projections. They aren't fact. They aren't based on hard data. They are based on our sense of what is going to happen. And I must say: both CBO and the actuaries at Social Security have tremendously talented people who give us those estimates, but they are still just estimates.

Now, the Social Security Administration's actuaries have been doing this since the beginning of Social Security. The Congressional Budget Office has begun doing this over the last 10 to 12 years. I know that CBO has far more responsibilities than just monitoring Social Security. The actuaries are concerned about Social Security and Social Security and its impact through other programs, but Social Security alone, and so let's make sure we are looking at apples versus apples, not apples versus oranges, as we make our projections, because they are very important and, in fact, affect the lives of so many Americans.

We should mention that, as we move forward, I think most people agree that that surplus in the trust fund is going to be consumed over the next 16, 18 years, somewhere in that area, maybe a little longer. It depends on what economic growth is. But let's look at this in the broader context because it is not just about where Social Security is. It is where our government and our operations are moving forward.

So let me give you a quick example. Social Security provides services, benefits to 60 million Americans. Okay. Let me give you another comparison. Department of Defense protects all Americans. The Department of Defense has a budget annually somewhere right now of about $600 billion. Social Security, through the moneys it has collected and then paid out, we are talking about $900 billion that are sent out to Americans who work and earn their benefits. There is a dedicated stream of money for Social Security, the contributions that we mentioned before that people pay out of their paychecks, the FICA tax. There is no dedicated source of money for the Department of Defense. If we were to do a projection of what the costs for our defense would be over the same 75 years that we are trying to project for Social Security, we would find that we would be spending trillions upon trillions of dollars that we don't have. Now, we are going to find the money because we want to protect our Nation, but when we make the comparisons about what is going to happen to Social Security, let's remember that it has a secure source of funding. Department of Defense doesn't.

And so, quite honestly, the projected deficit or debt created by Defense would be greater than the projected deficit created by So-

cial Security, and I could say that about others things. Tax breaks. We have a tax break for capital gains and dividends. It costs us about $100 billion a year. We don't pay for that. If we were to run the projected deficits created by providing tax breaks to folks who take advantage of capital gains and dividends tax cuts, that would be trillions as well.

That is all I would say, Mr. Chairman, as I close, that we want to put everything in perspective. We want to remember what we are out to do, and we are out to make sure that Americans can rely on something as secure as what Social Security has been for generations. That is our task. We can do that on a bipartisan basis.

And the first thing we should do is make sure that Social Security, the Social Security Administration has the resources it needs to actually administer its programs for the tens of millions of Americans who are paying into it and the tens of millions of Americans who are receiving their benefits after having paid into it.

With that, I will yield back the balance of my time.

Chairman JOHNSON. Thank you.

As is customary, any member is welcome to submit a statement for the hearing record.

And before we move to our testimony, I want to remind our witnesses to please limit your oral statements to 5 minutes, unlike what my friend did.

However, without objection, all the written testimony will be made a part of the hearing record.

We have two witnesses today. Seated at the table are Stephen Goss, Chief Actuary, Social Security Administration, and Dr. Keith Hall, Director, Congressional Budget Office.

Welcome, and thanks for being here.

Mr. Goss, please proceed.

STATEMENT OF STEPHEN C. GOSS, CHIEF ACTUARY, SOCIAL SECURITY ADMINISTRATION

Mr. GOSS. Thank you very much, Chairman Johnson, Ranking Member Becerra, Members of the Subcommittee. It is a pleasure to be here today on this topic. Let me start with just saying that really reiterating a point that has been made: actuarial projections, actuarial valuations have been done for Social Security since actually before 1935, before enactment. They are critical, obviously, to you as lawmakers. At the start of the program, they were, and they are today again as we have to move forward with this program.

The annual Trustees reports required by law have been forthcoming every single year, starting 1941 through 2016, and a key point in the requirement in those reports is to speak to the actuarial status, which we do by 75-year projections. These are obviously quite different from a 5-year or 10-year budget projections; 75-year actuarial valuation is really quite a different animal.

In our office, we do have 45 actuaries and demographers. We also have eight economists and statisticians. Obviously, because we have been around for a while, we have immense experience. We also have access to all data internal to Social Security and throughout the rest of the government.

Now, what our office actually does in the Trustees report process—we are not the Trustees; we are an office that works with the

Trustees. We do develop the methods. We draft the reports, and we also propose assumptions to the Trustees every year.

Now, I can give you assurance as to the reasonableness of the assumptions and the appropriateness of the methods because the law also requires that the Chief Actuary put a statement of actuarial opinion in each report, and that has been there every year. We have not had exception to the assumptions per se of reports in the past.

Transparency, you are probably familiar, we have technical panels put forth by our advisory board. We have a full scope audit of our work in incredible detail. And we share everything with everybody who asks, including our friends a CBO. We share immense detail with them.

One of the hallmarks of what the Trustees have stood for over all the years—and I am so proud to be able to say that I have been a part of this process—is stability and incremental change, to only have incremental change. Every year, for our portfolio, we have got one more year of data. That is it. And so we always just do incremental change.

Now, let me—oh, great. Okay. Next slide. So let me just show you here a picture of—this is the so-called actuarial balance that you are familiar with and I think Chairman Johnson was referring to. It is really just an expression of over 75 years of what our shortfall looks like as a percentage of the payroll over that 75-year period.

The blue line is what we have been projecting in our Trustees reports for 2002 through 2016. Of course, it goes all the way back to 1941, and you can see sort of the relative stability. We think that is really important. You can see CBO has—they started in 2004. At that point, the CBO projections were only half as large a shortfall as the Trustees were saying.

As of 2012, that sort of changed, and CBO is now projecting a much larger shortfall than Social Security, and it has been getting even larger and larger, which is sort of part of the point of this hearing, to sort of understand that, I assume.

On the next slide, I just want to indicate that there are really currently—and this has changed over time. We have much detail in the written testimony of this. Currently, there are four main reasons why we have differences in the projections. It relates to birth rates; employment rates; earnings inequality; other, mainly methods. You can see here the cost rates. We have the cost rates going up because of the aging of our population, and CBO has a much, much larger increase in the cost rates as we go forward.

Now, let's just take a look at the birth rates. The birth rates historically have been around—since 1990 to 2008, We had great stability. Now, the recession came along and affected many things, including birth rates dropping temporarily. This year, CBO has decided to alter their long-term assumption, so they have matched us in every year prior to this going back to 2004. They dropped down to 1.9 below the 2.0 that we and our Trustees are assuming. And I would just alert you to NCHS does birth expectation surveys of women in our population, and their birth expectations have been above 2 even throughout the recession. So we don't really believe that there is a basis at this point for dropping that assumption.

Labor force participation rates, one of the main economic variables, is a place where we have kind of really we think remarkable differentiation. We have expressed labor force participation rates here on like—on assuming there is no change in the age distribution of the population. So we get a pure look of what is happening, what sort of employment and desire to be employed. And you can see that the recession again had a big effect. We had a big drop in the recession. We are assuming we will come back from that and then grow a little bit as people over 65 get more and more in the labor force.

CBO has as, I would say, fairly dramatic drop in the labor force participation rates, back to levels that were existent really before women were largely getting into the labor force.

And the last slide I have here of some real serious content about a difference for us speaks to something that is really important, the earnings concentration at the top. And you can see on this slide that, between 1983 and 2001, we had a rather dramatic drop in this taxable ratio, the share of all the earnings that we have covered under Social Security that are taxable, and that speaks to the earnings concentration. That drop was so dramatic over that period, but over the last 13 years, 2001 to 2014, the rate of decline in that has been only one-third what it was in the earlier period, real deceleration. It has really slowed. And our Trustees and we are projecting that it will further decelerate in the future.

I am hoping that is not optimistic. We think that is an absolutely reasonable and appropriate place to be. You can see the red line of where CBO is having really an acceleration to a rate of decline that we have not really seen before.

And, with that, I think I had better stop. I just want to say, again, thank you so much for the invitation, and we look forward to continuing these projections and working with you on the shortfalls for Social Security in the future.

[The statement of Mr. Goss follows:]

Social Security's Solvency Challenge:
Estimates for the Annual Trustees Reports and by CBO, 2002 through 2016

Office of the Chief Actuary
Social Security Administration

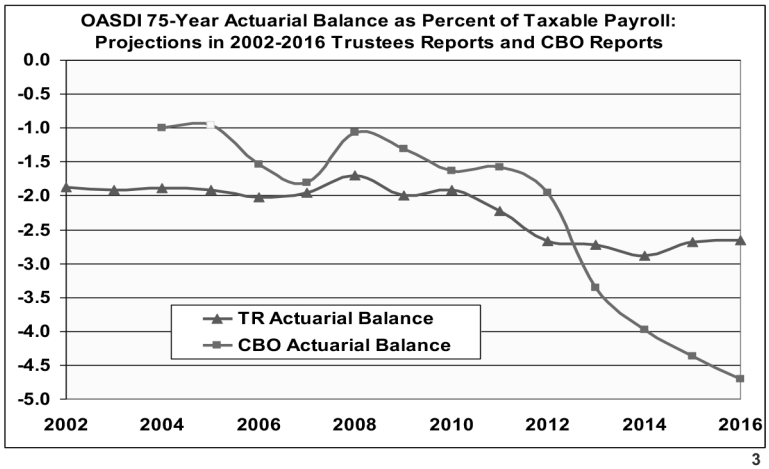
Baseline

- Actuarial projections started before 1935
  - Critical to lawmakers at the start, and now
- Annual Trustees Reports each year 1941-2016
  - "Actuarial status" required by law: *75-year projections*
    - Our office has 45 actuaries and demographers
    - And 8 economists and statisticians
  - Trustees Report process: *what our office does*
    - We propose assumptions, develop methods, draft reports
    - Actuarial opinion required by law in the report
  - Transparency: *technical panels, full-scope audit, share all*
  - Incremental change: *stability essential for lawmakers*

2

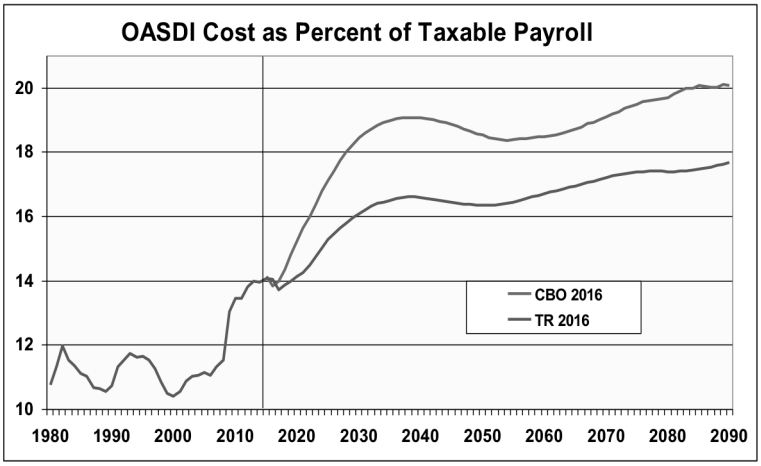
Estimating the solvency challenge: Trustees Reports have been consistent.

Changes should be incremental.



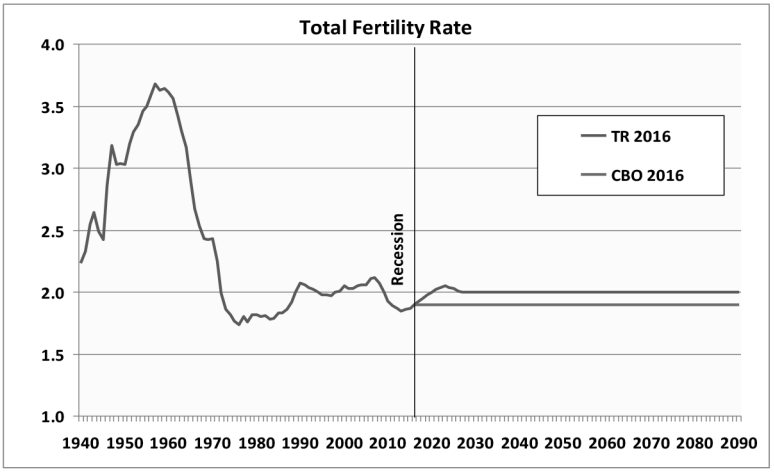
3

Currently, 4 main reasons CBO projects higher cost: *births, employment, inequality, other.*



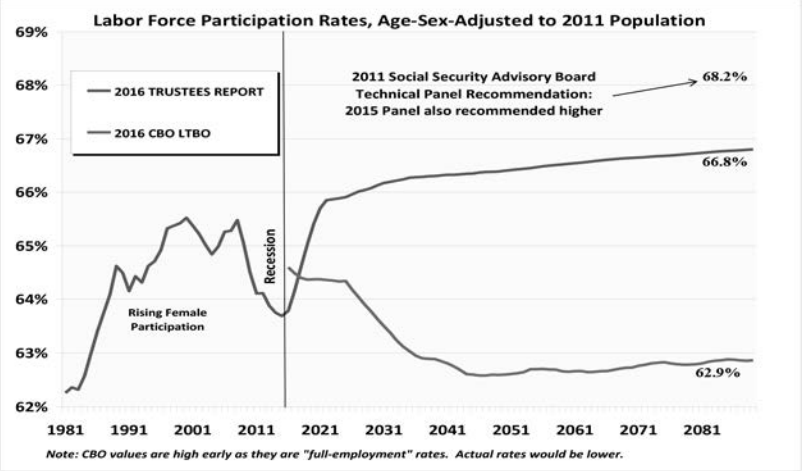
4

Birth rates: Birth expectations consistently above 2 children per woman through 2013.



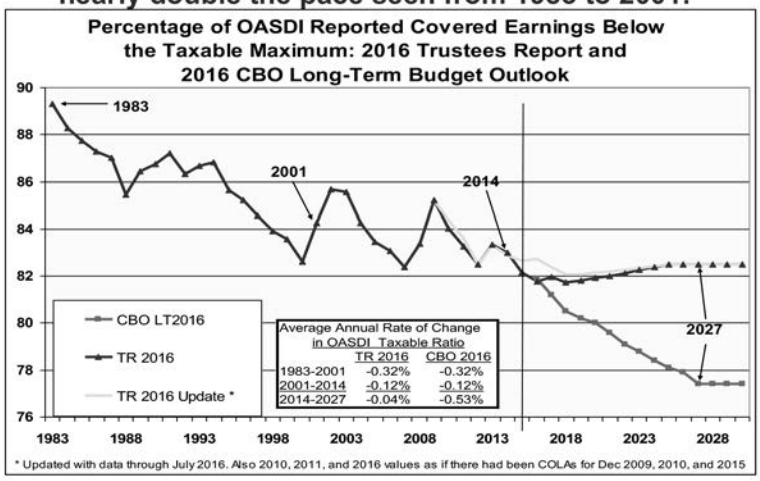
5

Labor force participation: CBO never recovers, and goes much lower in the future.



6

Earnings concentration at the top has decelerated since 2001. TR continues deceleration. But CBO assumes acceleration to nearly double the pace seen from 1983 to 2001.



7

Conclusion

- Social Security's solvency challenge
  - Size of shortfall is critical for lawmakers
  - Trustees Reports since 1941
  - Reliable, consistent, transparent, incremental
  - Immense oversight, scrutiny, and care
- 2016 Trustees Report
  - Actuarial balance is -2.66 percent of payroll
  - Lawmakers need to make changes by 2034
    - 33 percent higher revenue, or
    - 25 percent lower scheduled benefits, or
    - A combination of these changes

Chairman JOHNSON. Thank you.
[The prepared testimony of Mr. Goss follows:]

"Social Security's Solvency Challenge: Estimates for the Annual Trustees Reports and by CBO, 2002 through 2016"

Testimony by Stephen C. Goss, Chief Actuary, Social Security Administration
House Committee on Ways and Means, Subcommittee on Social Security
September 21, 2016

Chairman Johnson, Ranking Member Becerra, and members of the subcommittee, thank you very much for the opportunity to speak to you today about the solvency challenge facing Social Security, with a focus on the differences between estimates from the Trustees Reports and those from the Congressional Budget Office. Trustees Reports have been produced and submitted to the Congress every year starting in 1941, the year after monthly benefits were first paid from a Social Security trust fund.

Since testifying to you just three months ago on the issuance of the 2016 Trustees Reports, the actuaries, demographers, and economists in our office have continued to work with the Board of Trustees, the Social Security Advisory Board, your and other Congressional staffs, the Administration, our auditors, and numerous academics and other interested parties in developing the next Trustees Report and numerous proposals to modify this program. It is a real honor and a great responsibility for us to provide the very best possible projections and estimates for the consideration of all policymakers and, in turn, the American people who both finance and benefit from the program.

The Social Security Act requires that the Trustees annually report on the expected financial operations of the Social Security trust funds over the next 5 years. The law further requires reporting on the "actuarial status" of the Social Security trust funds, as it does for the Medicare trust funds. Assessment of the long-range actuarial status of these programs requires projections extending well beyond 5 years, and thus involves very different methods and assumptions than those appropriate for a short-term projection. Our experienced staff of 45 actuaries and demographers, plus 8 economists and statisticians, has unparalleled experience and expertise for this task. Actuarial valuation is a highly interdisciplinary exercise. The broad capabilities of our team, plus the access we have to technical panels, the staffs of the Trustees, and others federal agencies, give us the ability to explore and evaluate the many demographic, economic, and other factors critical to evaluating the Social Security program.

Since the inception of CBO, we have worked closely with directors and staff there in areas of common practice. Starting around 2002, CBO started development of a long-term model (CBOLT), and we worked closely with them at that time. To this day, we continue to provide

extensive annual detail to CBO on specifics of our projections. This is just one part of the transparency we believe is critical to maintain credibility for our projections.

Process for the Trustees Reports

The annual Trustees Reports are signed by the members of the Board, including the Secretary of the Treasury, the Secretary of Health and Human Services, the Secretary of Labor, the Commissioner of Social Security, and generally, two public Trustees nominated by the President and confirmed by the Senate. The Board and their staff provide a diverse and balanced group of highly knowledgeable individuals. We in the Office of the Chief Actuary work with the Trustees by proposing and discussing assumptions, developing the actuarial methods, producing the actuarial projections, and drafting the report. As an assurance that the assumptions used for the report are reasonable, the Social Security Act further requires that the Chief Actuary provide an actuarial opinion with each report speaking to the reasonableness of the assumptions and appropriateness of the methods. I am pleased to tell you that there has never been a need for the actuarial opinion to state that any assumption or method is unreasonable.

The projections we produce for the Social Security area population are also utilized for the Medicare Trustees Report and for the extended projections in the President's Budget. CBO used our population projections for their long-term estimates in 2004 through 2010. We also project Social Security cost and revenues for the President's Budget under the economic assumptions developed by the Administration for that report.

Fundamental to the projections we produce for the annual Trustees Reports is the concept of incremental change. It should be rare that new experience or insight from one annual report to the next would make a substantial change in the actuarial status. Enactment of legislation is the obvious exception to this principle. Boards of Trustees in all administrations have well understood the importance of making changes only gradually and after compelling evidence has accumulated. We have seen many cases where a measure appears to be moving in a new and different direction, only for that change to be reversed after a short time. Long-term projections should not react quickly to annual data, and the consistency of Trustees' projections is testament to the understanding of the current and past Boards of Trustees.

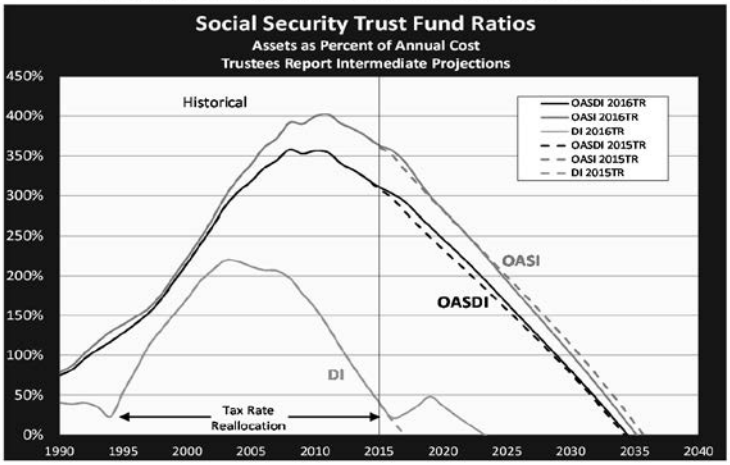
We have many levels of oversight. Our Social Security Advisory Board has continued the tradition of past Advisory Councils in commissioning Technical Panels every four years to evaluate our methods and assumptions and to make recommendations. Each panel is comprised of just a few individuals who must cover a very broad range of areas, and generally represent only one or two of several positions on a given area. We and the Trustees take the recommendations of the panels into consideration along with all other evidence we have at our disposal. Panels can at times become frustrated with our reluctance to adopt their recommendations and make abrupt changes, but often come to understand the value of

incrementalism. As one recent example, Alicia Munnell, chairperson of the 2015 Technical Panel, stated that she was glad the Trustees had not followed the recommendation of the panel to increase the assumed rate of decline in mortality for the 2016 Trustees Report (http://crr.bc.edu/briefs/social-securitys-financial-outlook-the-2016-update-in-perspective/).

Actuarial Status from the 2016 Trustees Report

At the risk of redundancy, let me briefly present a small portion of the findings from the 2016 Trustees Report that we discussed at the Subcommittee's hearing on June 22.

Social Security Solvency: 2016 Trustees Report
Projected Combined Trust Fund Reserve Depletion in 2034

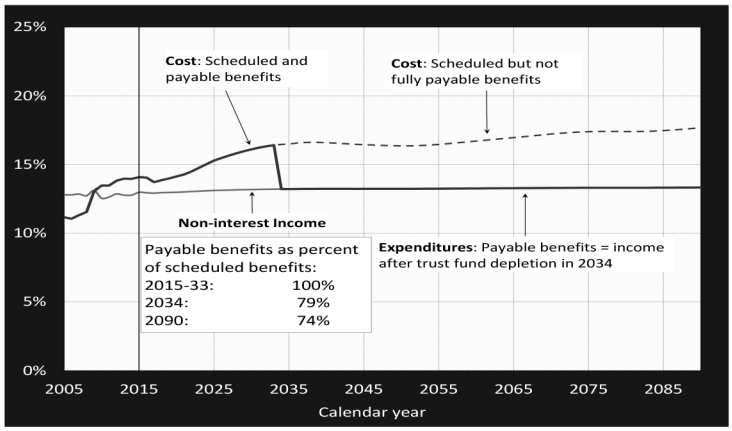


The figure above illustrates the projected dates of trust fund reserve depletion of the separate and combined Social Security trust funds. The Bipartisan Budget Act of 2015, which Congress passed last November, extended the date for DI reserve depletion by 6 years. Under the 2016 Trustees' intermediate assumptions, DI reserve depletion is now projected for 2023. The projected years of reserve depletion for the OASI fund (2035) and for the combined OASI and DI funds (2034) were unaffected by the BBA and by the new valuation for the 2016 Trustees Report.

The annual cost for the Social Security program will begin to exceed total income, including interest, in 2020. Cost already exceeds non-interest income. At the time of projected reserve depletion in 2034, we project that continuing revenue to the program will equal 79 percent of

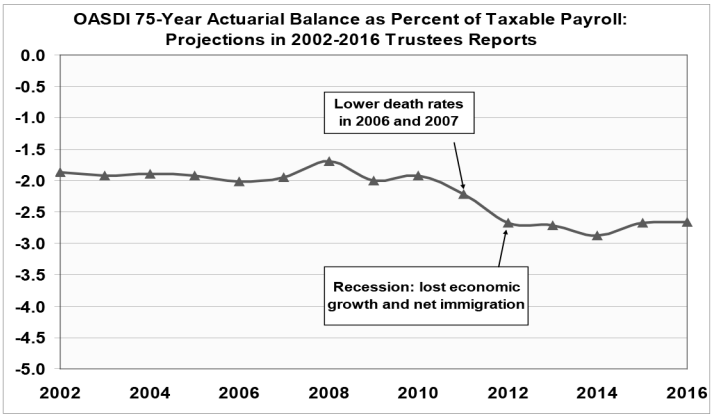
program cost. In the absence of Congressional action, full scheduled benefits would no longer be payable on a timely basis at that time. By the end of the 75-year projection period, if the Congress has not yet acted, we project that continuing revenue will equal 74 percent of the amount needed to pay full scheduled benefits. Because the trust funds have no borrowing authority, expenditures would be limited to continuing revenue in the event that reserves became depleted.

Annual Cost and Non-Interest Income as a Percent of Taxable Payroll



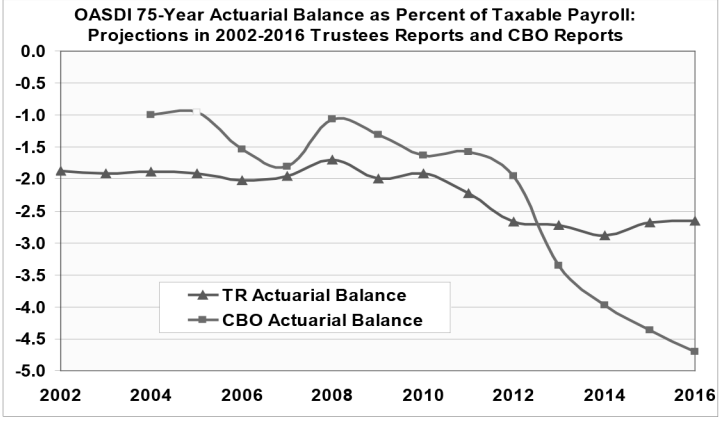
Estimating the Size of the Solvency Challenge

The figure below illustrates the history of Trustees' projections of the size of the "actuarial balance" for the Social Security program. When the actuarial balance is negative, it may be referred to as an actuarial deficit. The 75-year deficit, expressed as a percent of payroll, may be loosely interpreted as the increase in the payroll tax rate that could be enacted immediately in order to fully finance the program over the 75-year period.



For years 2002 through 2010, the actuarial deficit remained consistently around 2 percent of payroll. In 2011 and 2012, the size of the deficit increased somewhat in response to faster-than-expected mortality declines in 2006 and 2007 and effects from the recession. These recession effects included (1) lower economic growth that was expected to permanently lower the level of GDP and earnings and (2) a temporary reduction in the level of net immigration into the country. It should be noted that even with these effects, the increase in the Trustees' actuarial deficit from 2002 to 2016 was only about 0.7 percent of payroll, less than the change expected from just the passage of time. With each new valuation, the projection period advances one year, thus including one additional year (the 76th year from the prior valuation) that has a large projected annual shortfall. This change in valuation period increases the actuarial deficit by about 0.06 percent of payroll annually. Between 2002 and 2016, we would have increased the actuarial deficit by about 0.84 (14 times 0.06) percent of payroll, in the absence of any changes in assumptions, methods, or unexpected experience.

The figure below adds the 75-year actuarial balances for Social Security estimated by CBO in 2004 through 2016. CBO did not produce a new estimate for 2005, after their first long-term estimate in 2004. The value included is a rough estimate we calculated based on material CBO published for that year.

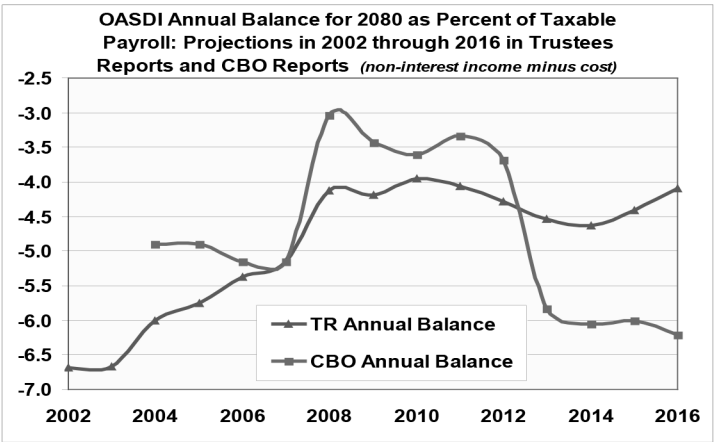


Initially, CBO projected lower benefits relative to tax revenue, and thus smaller deficits than in the Trustees Reports, even though CBO used the Trustees Report population projections in their entirety through 2010. Starting in 2013, CBO has used much more pessimistic demographic and economic assumptions, and the size of the actuarial deficit projected by CBO has been larger than that projected in the Trustees Report. Where CBO's projected actuarial deficit in 2004 was only half of that in the Trustees Report, CBO's projected deficit for 2016 was nearly double that in the Trustees Report.

It is worth noting that Social Security cost, income, and the projected shortfall under current law may also be looked at as a percent of Gross Domestic Product (GDP), and the Trustees Reports provide these values. These values are useful for comparing Social Security finances to other federal operations in the unified budget context. However, when considering "solvency" for Social Security, estimates as percent of taxable payroll are the most relevant and informative because the vast majority of revenue for the program derives from the payroll tax, and not from taxes more related to GDP. Because taxable payroll is about 35 percent as large as GDP, Social Security estimates expressed as a percent of GDP are measured to be about one third as large as when expressed as a percent of taxable payroll.

In addition to the summarized actuarial balance for the 75-year projection period, it is important to consider the size of annual shortfalls in the more distant years. These more distant shortfalls are critical in determining what changes to the program will be needed in order to pay scheduled benefits on a timely basis. The figure below compares the annual balance for the year 2080 projected for Trustees Reports and by CBO since 2002. It is worth noting that annual balances

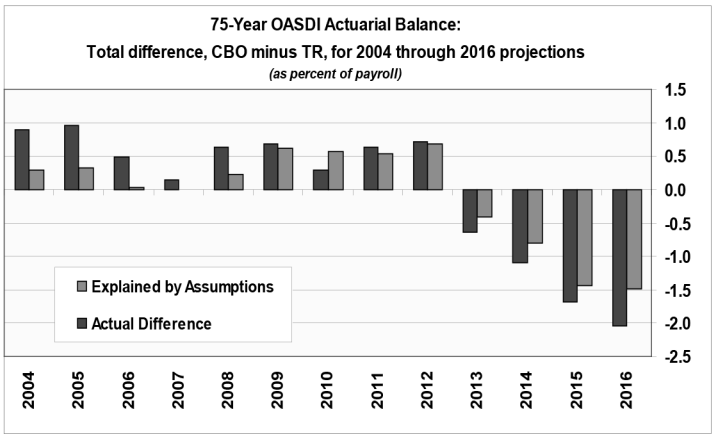
are unaffected by interest rates, which are largely irrelevant for a program financed on a pay-as-you-go basis.



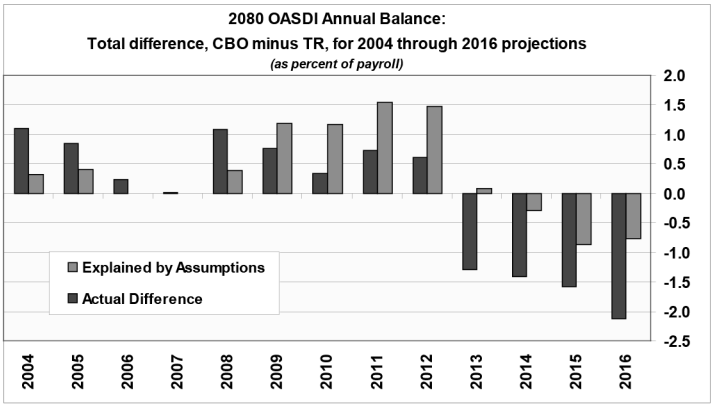
In Trustees Reports since 2002, projected annual deficits for 2080 that have generally decreased, reflecting evolving experience. Like the summarized actuarial deficits, annual deficits projected by CBO were smaller than those projected for the Trustees Reports through 2012, but have become progressively larger since 2013.

Explaining the Differences between Trustees Report and CBO Projections

Based on CBO's published demographic and economic assumptions starting in 2004, we have used our sensitivity analyses to estimate how different projections for the Trustees Reports would have been if we had adopted CBO's assumptions. The red bars in the figure below show the actual difference in the actuarial balance estimated by CBO compared to that estimated for the Trustees Report. The blue bars show the amount of the difference we are able to explain based on our assessment of known assumptions. We do not expect to produce a full explanation of the differences, as we are unclear on the way some assumptions have been implemented in CBO's model. In addition, CBO's model is structurally different from the model we use for the Trustees Reports. As mentioned above, early CBO projections produced much lower benefits and thus lower deficits. This difference is not included in the blue bar for the early CBO projections, because we do not have a definitive sense of the effect. We do know that the difference in benefits appears to have diminished, or has been offset by other methods changes, so that we have largely explained the differences in actuarial balance for 2009 through 2012.



Starting in 2013, when actuarial deficits projected by CBO began to exceed those in the Trustees Reports by an increasing margin, we have not had as much success in explaining the differences. Therefore, we conclude that there have been changes in CBO's model that we are unaware of, or implementation of assumptions different from our understanding, that are resulting in larger increases in CBO-estimated actuarial deficits.



The differences between CBO's projections and our projections for annual balances for 2080 are even more difficult to explain. The pattern is quite different from that for the 75-year actuarial balances. For the 2080 annual balance, we explain too much positive balance for CBO relative to Trustees Reports for years 2009 through 2012, but far less of the excess CBO annual deficits projected in 2013 through 2016. This suggests that there is a substantial methodological factor in CBO's projections since 2009 that is more pessimistic than for our projections.

Differences We Can Explain

The increase in 75-year actuarial deficits projected by CBO starting in 2013 is striking. Three demographic assumptions and three economic assumptions explain most of this increase.

In 2013, CBO stopped using Trustees Report mortality assumptions and began making their own assumptions. For the 2013 through 2015 projections, CBO reports that they assumed a roughly 1.2 percent annual rate of decline in death rates for all ages. This is dramatically different from historical experience and from the Trustees Report assumptions. In 2016, CBO modified their mortality assumptions, coming much closer to Trustees Report effects on actuarial balance, but roughly offset this effect by lowering their assumed birth rate to a level of 1.9 children per woman, below the 2.0 assumed for the Trustees Report. CBO also increased their disability incidence assumptions in 2013 and their net immigration assumptions in 2011, with partially offsetting effects on the actuarial balance. In 2016, CBO lowered their disability incidence assumption back to the level in the Trustees Report. One additional demographic factor that influences Social Security cost, differential mortality across individuals by their level of lifetime earnings, appears to be reflected in both models with roughly equal effect.

However, three changes in economic assumptions had an even larger combined effect. CBO's projected employment rates, and more specifically labor force participation rates, are far lower than recent experience and than the projections for the Trustees Reports. CBO has also assumed much more concentration of earnings for the top few percent of earners in their 2015 and 2016 projections. In addition, CBO has lowered the real interest rates assumed for trust fund reserve investments from over 3.0 percent through 2013 (higher than the Trustees Reports) to much lower rates starting in 2014. CBO's assumed real interest rates are considerably lower than long-term past experience and Trustees Report assumptions.

The table below identifies our estimates of the effects of differences in identifiable assumptions for the projections of actuarial balance presented in the 2015 and 2016 reports. For 2015, CBO's projected actuarial balance was 1.69 percent of payroll more negative than the projection in the Trustees Report. For 2016, CBO's projected actuarial balance was 2.04 percent of payroll more negative, nearly doubling the Trustees report actuarial deficit of 2.66 percent of payroll.

Four of the six differences in assumptions mentioned above are highlighted in the table below as particularly important determinants of the difference in estimated actuarial balance. These are

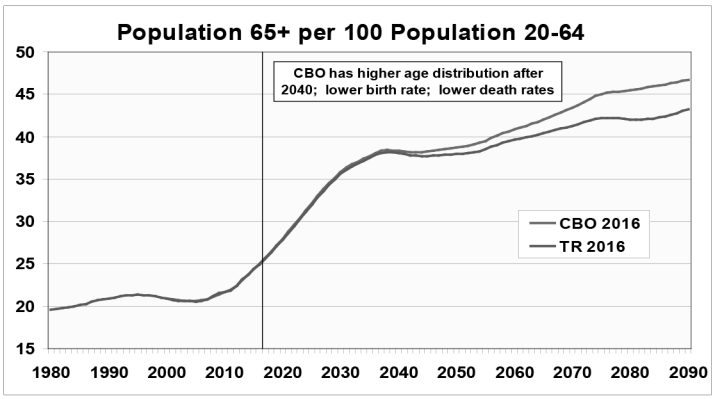
fertility, mortality, labor force/employment, and the effect on the "taxable ratio" of increased concentration of earnings for the highest earners. In both the 2015 and 2016 projections, these four assumptions account for 75 percent of the actual difference between the CBO and Trustees Report projections of actuarial balance. The remaining difference is largely attributed to unexplained model differences.

Difference in Actuarial Balance: CBO Minus TR

	2016 Projections		*2015 Projections*	
	percent of taxable payroll	*percent of difference*	*percent of taxable payroll*	*percent of difference*
Total difference	**-2.04**	**100%**	**-1.69**	**100%**
Fertility	**-0.23**	**11%**	**0.04**	**-2%**
Mortality	**-0.14**	**7%**	**-0.41**	**24%**
Immigration	**0.12**	**-6%**	**0.09**	**-5%**
Real earnings growth	**0.00**	**0%**	**0.05**	**-3%**
CPI inflation	**-0.04**	**2%**	**-0.07**	**4%**
Unemployment rate	**0.06**	**-3%**	**0.02**	**-1%**
Real Interest rate	**-0.16**	**8%**	**-0.25**	**15%**
Disability incidence	**0.00**	**0%**	**-0.05**	**3%**
Differential mortality	**0.00**	**0%**	**0.00**	**0%**
Labor Force/employment	**-0.60**	**29%**	**-0.52**	**31%**
Taxable ratio	**-0.57**	**28%**	**-0.39**	**23%**
Taxation of benefits	**0.07**	**-3%**	**0.07**	**-4%**
Other, methods?	**-0.55**	**27%**	**-0.26**	**15%**

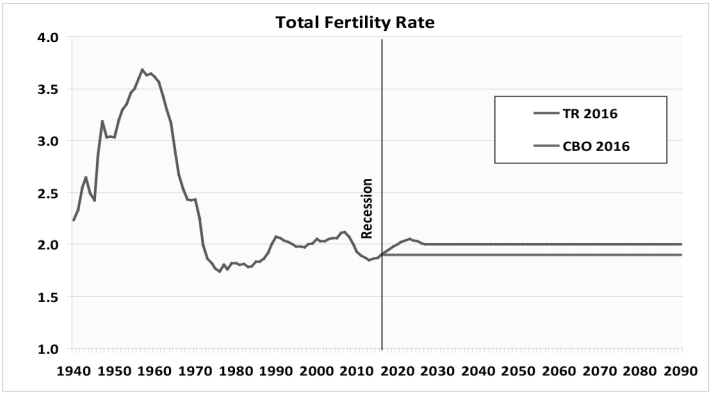
Demographic Assumptions

One effective way to compare the implications of differences in demographic assumptions for the cost of Social Security is by considering the resulting age distribution of the population. A common proxy for the full age distribution is the "aged dependency ratio," which is the ratio of the population age 65 and over to the population at ages 20 through 64. This ratio of beneficiary-age to working-age population is a good indicator of demographic effects on the cost of the program as a percent of the taxable payroll.

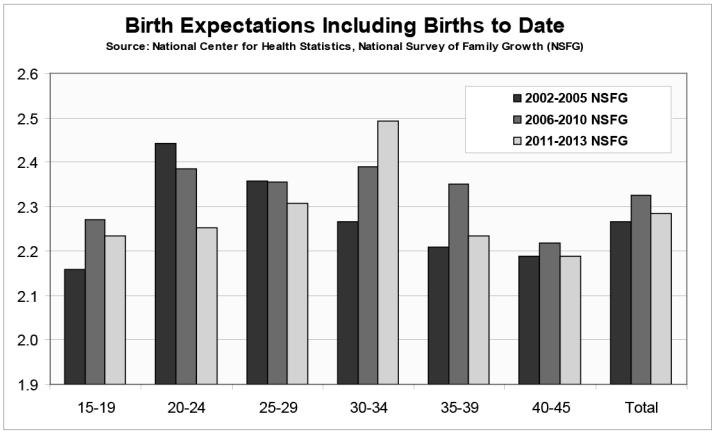


The figure above shows that for the 2016 projections, the combination of CBO's fertility, mortality, and immigration assumptions yields a very similar age distribution through about 2040 compared to our projections. After 2040, however, CBO's age distribution becomes much more weighted to individuals over age 65. This is consistent with lower birth rates and lower mortality.

The figure below illustrates the reduced total fertility rate (TFR) assumed by CBO starting with their 2016 projections. In particular, we note the dip in the TFR experienced in the recent recession, which CBO assumes will be permanent. This is in contrast to the prerecession period 1990 through 2008, when the TFR averaged above 2.0.



Surveys of women between ages 20 and 45 conducted periodically by the National Center for Health Statistics (NCHS) continue to indicate that women intend to have more than 2 children, on average, over their lifetime. This strongly suggests that the dip in birth rates during the recent recession may represent a temporary reduction, as opposed to a permanent reduction, in the TFR.

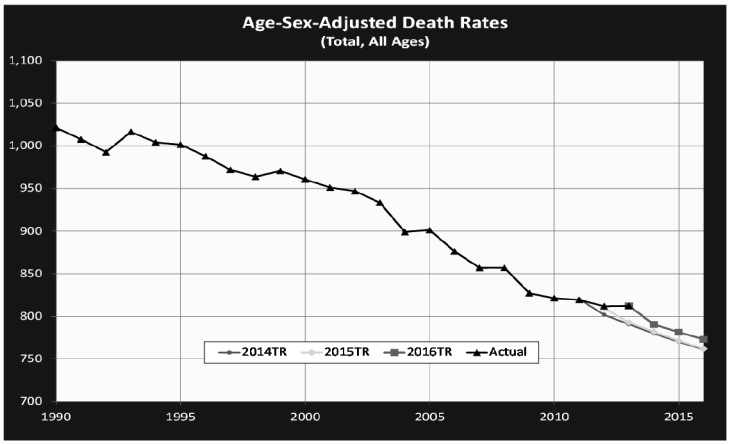


Mortality

Mortality assumptions have been the subject of enormous discussion and controversy. Over long periods of time, death rates have declined rapidly at certain times and slowly at other times. The Office of the Chief Actuary recently published an actuarial note (https://www.ssa.gov/OACT/NOTES/pdf_notes/note158.pdf) that provides a comprehensive look at competing views. For Trustees Reports, we have always taken a long-term view of mortality improvement, setting ultimate rates of reduction based on expected future conditions. Our approach considers medical advances and spending, behavioral aspects of our population, and the historical persistent fact that death rates have declined much faster at younger ages than at older ages. Our approach has stood the test of time: the projected improvement from 1980 to 2010 in unisex life expectancy at age 65 that was included in the 1982 Trustees Report (the baseline used for development of the 1983 Social Security Amendments) has been realized almost exactly. Going forward, we project a continued "age gradient" in mortality improvement, but with a somewhat diminished difference between younger and older ages.

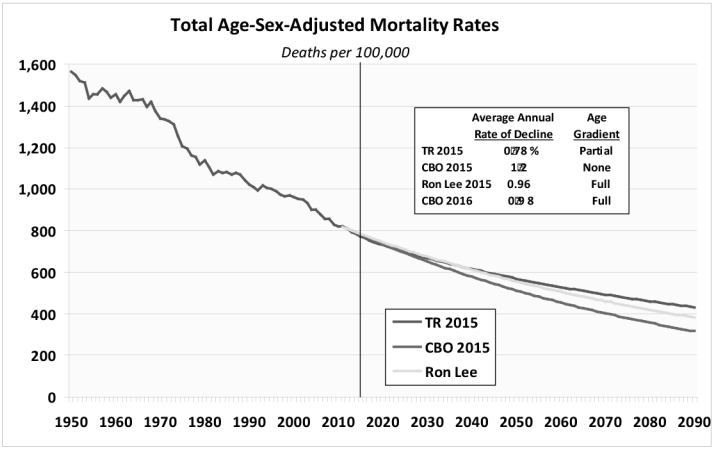
In 2013, CBO for the first time diverged from our mortality projections. CBO assumed a very high rate of improvement overall and applied this rate for all ages. CBO's approach produced slower mortality declines at younger ages and faster declines at older ages. Both of these changes increase the aged dependency ratio and the cost of the program as a percent of payroll.

Since 2009, mortality rate improvement has slowed markedly, resulting in small changes in the 2015 and 2016 Trustees Report mortality rate projections, as seen in the figure below.



Recently, noted demographer Ronald Lee made a new projection of future mortality rates, using for the first time the Medicare data for ages 65 and over. The Medicare data are universally accepted as the most accurate death rate data available. Lee fitted death rates to historical experience from 1950 through 2011 using his "Lee and Carter" method, which essentially assumes that mortality will decline at the same rate in the future as it has in the past, for each age and sex. As Actuarial Note 158 indicated, using Lee's new projection resulted in the same overall Social Security actuarial status over the 75-year projection period as does our mortality projection. Lee's method extrapolates a faster overall rate of decline, effectively assuming that the positive experience seen over the last 50 years, including the effects of dramatic health spending growth and the startup of Medicare and Medicaid, will be replicated in the future. His method also assumes that there will be no deceleration in mortality improvement in the future. However, these presumptions are offset by his method's maintaining the same large age gradient in mortality of the past for the future. Overall, we believe that a slight decelerating rate of improvement in mortality with a lessened age gradient is the most likely scenario for the future.

As seen in the figure below, CBO's 2015 projections assumed a much faster rate of decline in mortality. (The same was true for their 2013 and 2014 projections.) However, recognizing the recent slowdown in mortality improvement, and the importance of the age gradient, CBO changed their mortality projection for 2016 to be close to what Ron Lee has produced. Again, while the new CBO projection has a faster overall rate of decline, it has a much larger age gradient than the projections for the Trustees Report. Overall, the 2016 difference in the CBO and Trustees aged dependency ratio and the cost of the program due to mortality assumptions is assumed to be much smaller than in 2015.

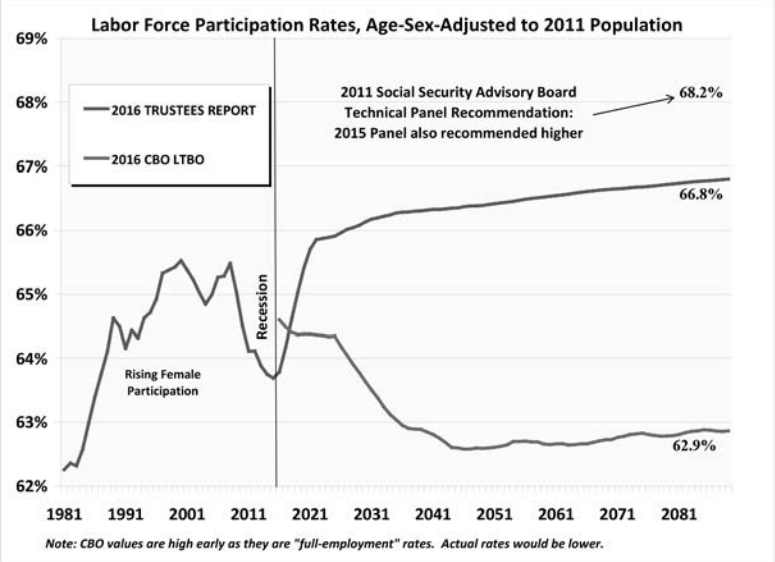


The 2015 Technical Panel appointed by the Social Security Advisory Board recommended that the Trustees retain the age gradient and the cause-specific mortality rates, but that we increase the average rate of decline to 1 percent. As mentioned above, after seeing the recent historical data, the chairperson of the panel stated that it is good that the Trustees did not follow the panel's recommendation for faster mortality reduction in the future.

Economic Factors

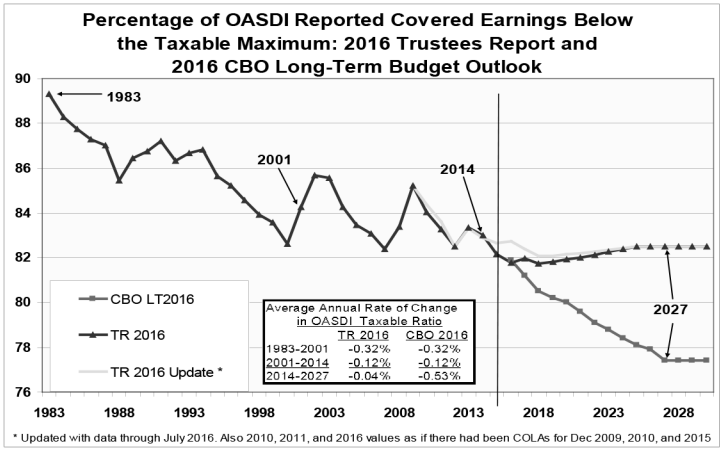
Projections of employment, and particularly labor force participation rates (LFPRs), are a source of substantial difference between CBO and the Trustees Reports. The recent extraordinary recession resulted in large reductions in employment and LFPRs, from which we have only begun to recover. The figure below shows historical and projected age-sex-adjusted LFPRs from the 2016 projections. CBO projections shown are for "full-employment" conditions as "actual" LFPR were not available from CBO at this time. By 2030, CBO values likely match their actual.

CBO projects little recovery from the recession with a steady decline in LFPRs to levels not experienced since the early 1980's, before women fully participated in the labor force. The Trustees Report includes projections with LFPRs basically recovering to prerecession levels and then rising very gradually after 2020, reflecting the assumed increasing health, longevity, and ability to work by the population over age 65 in the future. We note that the 2011 Technical Panel recommended even higher ultimate LFPRs. The 2015 panel also recommended higher LFPRs than assumed for the Trustees Reports. We continue to believe that the more conservative assumptions used in the Trustees Report are the most reasonable assumption at this time.



The second economic factor that contributes to the CBO's higher cost for Social Security is the difference in earnings growth between high earners and low earners. Since 1983, there has been a substantial increase in the concentration of earnings in the top few percent of workers.

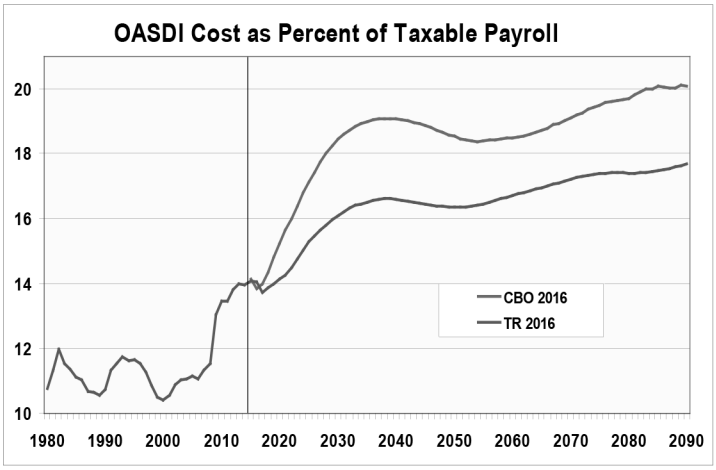
Because annual earnings subject to the Social Security payroll tax for each worker are limited to $118,500 in 2016, the top 6 percent of earners do not pay any tax on their earnings above this level. The increasing concentration at the top has reduced the percent of all covered earnings that are taxable from over 89 percent in 1983 to about 83 percent in 2014.



Fortunately, the rate of increase in such concentration has been decreasing. Between 2001 and 2014, the rate of decline in the percent of earnings taxable dropped to only one-third of the rate observed between 1983 and 2001. For the Trustees Report, we assume this deceleration will continue, with the rate of change in the taxable percentage declining between 2014 and 2027 at one-third the rate experienced from 2001 to 2014. However, CBO assumes a significant reacceleration in the concentration of earnings for the highest earners, with a rate of decline in the taxable percentage from 2014 to 2027 of almost double the rapid rate between 1983 and 2001, and over four times the rate experienced between 2001 and 2014. We do not expect that conditions over the next 11 years would result in this dramatic increase in the concentration of earnings for the highest earners.

Result: 2016 Trustees vs. CBO Cost Rate Projections

The result of the differences in demographic and economic assumptions described above, plus the unexplained differences likely related to model structure, is a sharp and immediate rise in the CBO projected Social Security cost as a percent of taxable payroll, well above the level projected in the Trustees Report.



As seen above, the differences in demographic assumptions cause the CBO aged dependency ratio, and thus the cost as a percent of payroll, to exceed our projections after about 2040. The striking and increasing difference in the cost rate that occurs between 2016 and 2040 is largely the result of CBO's drop in LFPRs and increase in the concentration of earnings for the highest earners.

It is worth noting that differences in mortality by earnings and benefit level appear to be reflected similarly in the CBO and Trustees Report projections. This is also true for disability incidence rate assumptions, which CBO reduced for their 2016 projections, matching the assumptions used for the Trustees Report.

Conclusion

An accurate estimate of Social Security's solvency challenge will be critical for lawmakers in the upcoming discussions on how to best address the program's financing shortfall. Since 1941, the Trustees Reports have provided the Congress, the Administration, and the American people carefully developed projections. These projections have proven to be reliable, consistent, transparent, and reflect the latest data and expectations incrementally. The Trustees Report projections have been subject to immense oversight, scrutiny, and care in preparation.

The 2016 Trustees Report projects an actuarial deficit of 2.66 percent of payroll. Lawmakers need to make changes by 2034 that provide: (1) 33 percent higher revenue, (2) 25 percent lower scheduled benefits, or (3) some combination of these changes. I and all in the Office of the Chief Actuary look forward to continued work with you and your staffs on developing options for consideration to best address that solvency challenge.

Please note that the 2016 and all prior year's Trustees Reports are available at https://www.ssa.gov/oact/pubs.html, along with a wide variety of additional actuarial analysis related to the reports, and to changes policymakers have considered for making adjustments to the program.

Again, thank you for the opportunity to talk about the actuarial status of the Social Security program. I will be happy to answer any questions you may have.

Chairman JOHNSON. You are recognized, sir.

STATEMENT OF KEITH HALL, PH.D., DIRECTOR, CONGRESSIONAL BUDGET OFFICE

Mr. HALL. Chairman Johnson, Ranking Member Becerra, and Members of the Subcommittee, thank you for inviting me to testify this morning. For some time, both the Congressional Budget Office and the Social Security Trustees have projected that, if full benefits are paid under the formula specified in current law, Social Security spending would rise significantly during the coming decades.

In contrast, total revenues for the program are anticipated to grow more slowly than outlays. The faster growth projected for total benefits than for total revenues means that a shortfall in the program's finances is expected to continue.

Although both CBO and the Trustees project such a shortfall, we differ in our assessment of its magnitude. Over the next 75 years, if current laws remain in place, CBO projects that the program's actuarial deficit would be up 1.55 percent of gross domestic product. There are several ways to explain what the actuarial deficit represents. For instance, it would be possible to pay the benefits prescribed by current law and maintain the necessary balances in the program's combined trust funds through 2090 if payroll taxes were raised immediately and permanently by 1.55 percent of GDP, scheduled benefits were reduced by an equivalent amount or some combination of tax increases and spending reductions of equal present value was adopted. In 2017, 1.55 percent of GDP would be about $300 billion.

Another way to understand the magnitude of the shortfall is to consider the effects of policies that could be combined to address it. Last year, we estimated the effects of 32 options that would provide the actuarial balance. For example, gradually increasing the payroll tax rate by 3 percentage points over 60 years would improve the 75-year actuarial balance by one-half of 1 percentage point of GDP, as would reducing benefits across the board by 15 percent by the mid-2030s.

The Social Security Trustees' projection of the 75-year actuarial deficit is 0.95 percent of GDP, six-tenths of a percentage point less than CBO's projection. Two-thirds of the difference comes from four major inputs into estimates of the system's finances. First, the Trustees' higher estimate of earnings subject to the program's payroll tax explains 23 percent of the difference. Key components of nominal GDP growth projected by the Trustees—higher labor force participation rates partially offset by higher unemployment rates, higher productivity growth, and higher inflation explain 22 percent. Demographics—projections by the Trustees of higher fertility rates partially offset by lower immigration rates and of slower improvements in mortality rates explain 15 percent.

The Trustees' projection of higher interest rates, higher real interest rates in the long run—that is, rates adjusted to remove the effects of inflation—explain 6 percent.

The remaining one-third of the difference arises mainly because the approaches used by CBO and the Trustees to make estimates differ in various ways, even when the four major inputs are the same. For example, in CBO's modeling, payroll taxes collected from

and Social Security benefits received by a retired worker are calculated on the basis of earnings projected for that person, thus ensuring consistency in the projections of payroll taxes and benefits.

The Trustees project benefits on the basis of earnings data for a recent cohort of beneficiaries who are retired workers. Those data are adjusted to account for future earnings growth and for other projected changes in the labor market. The Trustees project payroll taxes separately.

The exhaustion date of the programs combined trust funds is another measure of its finances. CBO projects that the trust funds will be exhausted in 2029. If CBO adopted the Trustees' projections of the four major inputs, it would project the trust funds to be exhausted in 2033, 1 year earlier than the Trustees project.

Each of the major inputs into our estimates is uncertain, especially over a 75-year period. We update our projections each year to incorporate the best information available from the research community as well as feedback on our analytical approach and other improvements in modeling.

As a result of updates in the past year, for instance, our estimates of the actuarial deficit in 2016 is slightly larger than it was in 2015. Contributing factors include lower projected interest rates, GDP, and taxable payroll amounts, changes to projected educational attainment and to the ages at which future retirees choose to claim Social Security, and the effects of the 1-year shift in the projection period. Those factors are partially offset by revised demographic projections and lower projected rates of disability incidents.

My written testimony provides much more information about the basis for CBO's projections. I am happy to answer any questions that you may have. Thank you.

Chairman JOHNSON. Thank you, sir. I appreciate your testimony.

[The prepared testimony of Mr. Hall follows:]

Congressional Budget Office

Testimony

Comparing CBO's Long-Term Projections With Those of the Social Security Trustees

Keith Hall
Director

Before the Subcommittee on Social Security
Committee on Ways and Means
U.S. House of Representatives

September 21, 2016

This document is embargoed until it is delivered at 10:00 a.m. (EDT) on Wednesday, September 21, 2016. The contents may not be published, transmitted, or otherwise communicated by any print, broadcast, or electronic media before that time.

Chairman Johnson, Ranking Member Becerra, and Members of the Subcommittee, thank you for inviting me to testify this morning. As you know, Social Security pays benefits to retired workers, to their eligible dependents, and to some survivors of deceased workers, and also makes payments to disabled workers and to their dependents until those workers are old enough to claim full retirement benefits. The program is funded by dedicated tax revenues from two sources—mostly from a payroll tax, but also from income taxes levied on Social Security benefits. Those revenues are credited to the two trust funds that finance the program's benefits.

Since 2010, annual outlays for Social Security have exceeded the program's receipts, excluding interest credited to the trust funds. In 2015, outlays exceeded receipts, excluding interest, by 8 percent. When such a gap exists, the difference is a draw on the government's cash in that year that must be made up either by running a surplus in the rest of the federal budget or through additional government borrowing in that year.

For some time, both the Congressional Budget Office and the Social Security Trustees have projected that, if full benefits were paid under the formulas specified in current law, the program's spending would rise significantly during the coming decades. In contrast, total revenues for the program are anticipated to grow more slowly than outlays: The faster growth projected for total benefits than for total revenues means that a shortfall in the program's finances is expected to continue. Although both CBO and the Trustees project such a shortfall, they differ in their assessment of its magnitude. This testimony describes that difference and the major factors that contribute to it.

What Is CBO's Estimate of Social Security's Actuarial Balance?

Over the next 75 years, if current laws remained in place, the program's actuarial balance would be -1.55 percent of gross domestic product (GDP), CBO projects.[1] The estimated actuarial balance over a given period is a common measure of the sustainability of a program that has a trust fund and a dedicated revenue source. When that balance is negative, it is a deficit. The actuarial balance is calculated as the sum of the present value of projected tax revenues and the current trust fund balance minus the sum of the present value of projected outlays and a year's worth of benefits at the end of the period. (A present value is a single number that expresses a flow of future income or payments in terms of an equivalent lump sum received or paid at a specific point in time.) Although the 75-year actuarial balance is traditionally presented as a share of taxable payroll—that is, as a share of the earnings subject to Social Security's payroll tax—CBO has generally focused on that balance as a percentage of GDP because doing so better captures the share of national economic activity devoted to Social Security's revenues and outlays, which determine the system's finances.

There are several ways to explain what the actuarial balance represents. For instance, it would be possible to pay the benefits prescribed by current law and maintain the necessary balances in the program's combined trust funds (one each for the program's two parts: Old-Age and Survivors Insurance and Disability Insurance) through 2090 if payroll taxes were raised immediately and permanently by 1.55 percent of GDP, scheduled benefits were reduced by an equivalent amount, or some combination of tax increases and spending reductions of equal present value was adopted. In 2017, 1.55 percent of GDP would be about $300 billion. Last year, CBO estimated the effects of 32 options that would improve the actuarial balance and that illustrate the magnitude of specific policy changes that could be combined to make up the shortfall in the program's finances.[2] For example, gradually increasing the payroll tax rate by 3 percentage points over 60 years would improve the 75-year actuarial balance by 0.5 percentage points of GDP, as would reducing benefits across the board by 15 percent by the mid-2030s.

How Does CBO's Estimate Compare With That of the Social Security Trustees?

The Social Security Trustees' projection of the 75-year actuarial balance is -0.95 percent of GDP, 0.6 percentage points less negative than CBO's projection (see Figure 1 and Table 1). Two-thirds of the difference between those two numbers would be eliminated if CBO adopted the Trustees' projections of four major inputs into estimates of the system's finances:

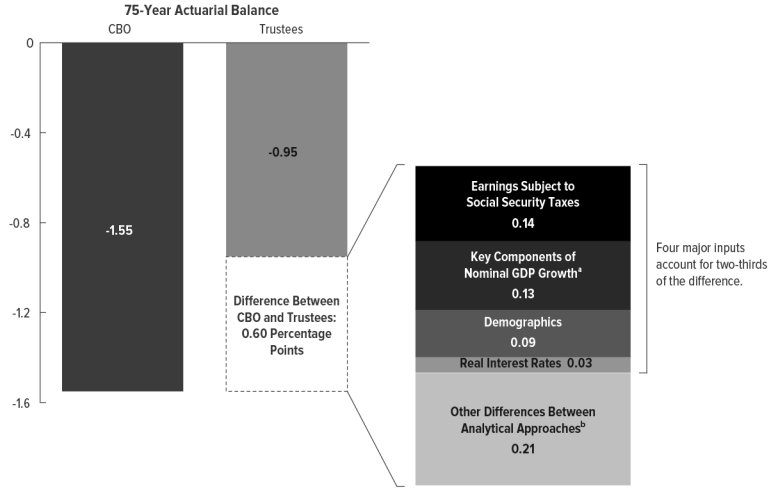
1. For additional discussion of CBO's most recent long-term projections for Social Security, see Congressional Budget Office, *The 2016 Long-Term Budget Outlook* (July 2016), Chapter 2, www.cbo.gov/publication/51580. Those projections incorporated CBO's 10-year economic forecast released in January 2016 and its 10-year budget projections released in March 2016.

2. See Congressional Budget Office, *Social Security Policy Options, 2015* (December 2015), www.cbo.gov/publication/51011.

Figure 1.

Distribution of Differences Between CBO's and the Social Security Trustees' Projections

Percentage of Gross Domestic Product



Sources: Congressional Budget Office; Social Security Trustees.

These projections incorporate the assumption that spending for Social Security continues as scheduled even if its trust funds are exhausted.

The actuarial balance is the difference between the present value of annual tax revenues plus the initial trust fund balance, and the present value of annual outlays plus the present value of a year's worth of benefits as a reserve at the end of the period, each divided by the present value of GDP or taxable payroll. (The present value of a flow of revenues or outlays over time is a single number that expresses that flow in terms of an equivalent sum received or paid at a specific time. The present value depends on a rate of interest, known as the discount rate, that is used to translate past and future cash flows into current dollars.)

GDP = gross domestic product.

a. The key components of nominal GDP growth are the labor force participation rate, the unemployment rate, the rate of productivity growth, and the inflation rate.

b. Other differences include the estimated income taxes paid on Social Security benefits and the interactions among the four major inputs—earnings subject to Social Security taxes, key components of nominal GDP growth, demographics, and real (inflation-adjusted) interest rates—and differences that arise mainly because the approaches used by CBO and the Trustees to make estimates differ in various ways even when the major inputs are the same.

- The Trustees' higher estimate of earnings subject to the program's payroll tax;
- Key components of nominal GDP growth projected by the Trustees—higher labor force participation rates (partially offset by higher unemployment rates), higher productivity growth, and higher inflation;
- Demographics—projections by the Trustees of higher fertility rates (partially offset by lower immigration rates) and of slower improvements in mortality rates; and
- The Trustees' projection of higher real interest rates in the long run (that is, rates adjusted to remove the effects of inflation).

Table 1.

Differences Between CBO's and the Social Security Trustees' Projections of the 75-Year Actuarial Balance

	Published Projections	
	As a Percentage of GDP	As a Percentage of Taxable Payroll
CBO	-1.55	-4.68
Trustees	-0.95	-2.66
Difference Between the Projections	0.60	2.02

	Changes to CBO's Projections That Would Result From Adopting Each of the Trustees' Major Inputs to the Projections			
	As a Percentage of GDP		As a Percentage of Taxable Payroll	
	Percentage-Point Change	Difference Explained (Percent)	Percentage-Point Change	Difference Explained (Percent)
Earnings Subject to Social Security Taxes	0.14	23	0.72	36
Key Components of Nominal GDP Growth[a]	0.13	22	0.40	20
Demographics	0.09	15	0.28	14
Real Interest Rates	0.03	6	0.11	5
Other[b]	*	-1	-0.08	-4
Sum of all changes	0.39	65	1.43	71

Sources: Congressional Budget Office; Social Security Trustees.

These projections incorporate the assumption that spending for Social Security continues as scheduled even if its trust funds are exhausted.

The actuarial balance is the difference between the present value of annual tax revenues plus the initial trust fund balance, and the present value of annual outlays plus the present value of a year's worth of benefits as a reserve at the end of the period, each divided by the present value of GDP or taxable payroll. (The present value of a flow of revenues or outlays over time is a single number that expresses that flow in terms of an equivalent sum received or paid at a specific time. The present value depends on a rate of interest, known as the discount rate, that is used to translate past and future cash flows into current dollars.)

The 75-year projection period for the financial measures reported here begins in 2016 and ends in 2090.

GDP = gross domestic product; * = between -0.005 and 0.005 percentage points.

a. The key components of nominal GDP growth are the labor force participation rate, the unemployment rate, the rate of productivity growth, and the inflation rate.

b. Other changes include the differences in estimated income taxes paid on Social Security benefits and the interactions among the four major inputs: earnings subject to Social Security taxes, key components of nominal GDP growth, demographics, and real (inflation-adjusted) interest rates.

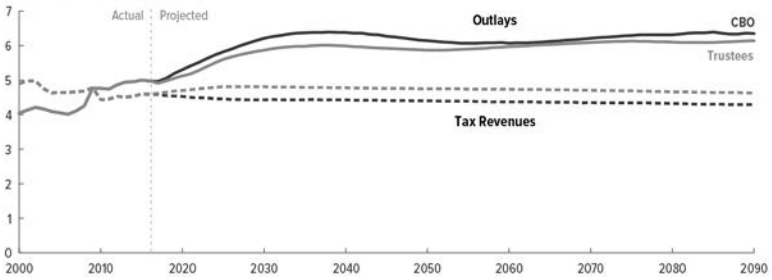
The remaining one-third of the difference arises mainly because the approaches used by CBO and the Trustees to make estimates differ in various ways even when the four major inputs are the same. For example, in CBO's modeling, payroll taxes collected from and Social Security benefits received by a retired worker are calculated on the basis of earnings projected for that person, thus ensuring consistency in the projections of payroll taxes and benefits. The Trustees project benefits on the basis of earnings data for a recent cohort of beneficiaries who are retired workers. Those data are adjusted to account for future earnings growth and for other projected changes in the labor market. The Trustees project payroll taxes separately.

Outlays as a percentage of GDP (also known as the cost rate) and revenues as a percentage of GDP (the income rate) are two other useful measures of the system's finances. Over the next 75 years, CBO projects, Social Security's outlays as a percentage of GDP will be higher and revenues will be lower than the Trustees project (see Figure 2). For example, for 2090, CBO's projections of revenues as a percentage of GDP are 8 percent below and its projections of outlays are 3 percent above the Trustees' projections (see Table 2). If CBO adopted the Trustees' projections for the four major inputs, its projection of outlays in 2090 (a year that is representative of long-term trends in the program) would be 4 percent higher than the Trustees', but both CBO and the Trustees

Figure 2.

Social Security Tax Revenues and Outlays

Percentage of Gross Domestic Product



Sources: Congressional Budget Office; Social Security Trustees.

These projections incorporate the assumption that spending for Social Security continues as scheduled even if its trust funds are exhausted.

Tax revenues generally consist of payroll taxes and income taxes paid on benefits. Outlays consist of benefits and administrative costs, which typically account for less than 1 percent of program costs.

would project essentially the same revenues for that year as a percentage of GDP. The difference in the projection of earnings subject to Social Security payroll taxes is the most important contributor to those results.

CBO projects that the program's combined trust funds will be exhausted in 2029. If CBO adopted the Trustees' projections of the four major inputs, it would project the trust funds to be exhausted in 2033—one year earlier than the Trustees project.

How Did CBO Project Social Security's Finances?

The agency's long-term projections for Social Security spending and revenues are based on a detailed microsimulation model that starts with data about individuals from a representative sample of the population and projects demographic and economic outcomes for that sample through time.[3] For each person in the sample, the model simulates birth, death, immigration and emigration, marital status and changes to it, fertility, labor force participation, hours worked, earnings, and payroll taxes, along with Social Security retirement, disability, and dependents' and survivors' benefits.

The amounts of Social Security benefits received and taxes paid, and the resulting gap between total revenues and benefits, depend on estimates of life expectancy, conditions in the labor market, and other factors. CBO's microsimulation model is designed so that, on average, the simulated economic outcomes of the sample equal the agency's long-term economic projections. Those economic projections are extensions of the 10-year economic forecast that underlies the agency's budget projections. They reflect not just historical averages but also trends that many economic forecasters expect will continue.[4]

3. The core individual-level data used in CBO's model come from the Continuous Work History Sample, an administrative data set provided by the Social Security Administration. Those data contain a history of individual earnings records for a sample, beginning in 1951, of 1 percent of all people who have been issued Social Security numbers. The data also contain demographic information and Social Security information for each individual. The information for Old-Age, Survivors, and Disability Insurance includes claiming dates, claim type (retiree, survivor, or disability), primary insurance amount, monthly benefit amount, and the reason for disability. For more detail, see Jonathan Schwabish and Julie Topoleski, *Modeling Individual Earnings in CBO's Long-Term Microsimulation Model*, Working Paper 2013-04 (Congressional Budget Office, June 2013), www.cbo.gov/publication/44306; and Congressional Budget Office, *CBO's Long-Term Model: An Overview* (June 2009), www.cbo.gov/publication/20807.

4. CBO regularly compares the accuracy of its two- and five-year economic forecasts with forecasts from the Office of Management and Budget and organizations in the private sector. See Congressional Budget Office, *CBO's Economic Forecasting Record: 2015 Update* (February 2015), www.cbo.gov/publication/49891.

Table 2.

Differences Between CBO's and the Social Security Trustees' Projections of Tax Revenues and Outlays in 2090

	As a Percentage of GDP		As a Percentage of Taxable Payroll	
	Tax Revenues	Outlays	Tax Revenues	Outlays
		Published Projections		
CBO	4.29	6.34	13.59	20.08
Trustees	4.63	6.14	13.33	17.68
Difference Between the Projections	0.34	-0.20	-0.26	-2.40
Percentage Difference Between the Projections	8	-3	-2	-12
		Changes to CBO's Projections That Would Result From Adopting Each of the Trustees' Major Inputs		
Earnings Subject to Social Security Taxes	0.41	0.36	-0.06	-0.81
Key Components of Nominal GDP Growth[a]	-0.01	-0.07	-0.01	-0.22
Demographics	-0.02	-0.25	-0.05	-0.75
Real Interest Rates	0	0	0	0
Other[b]	-0.05	0.04	-0.15	0.19
Sum of all changes	0.33	0.08	-0.28	-1.58
		Projections Using All of the Trustees' Major Inputs		
CBO With Trustees' Major Inputs	4.62	6.42	13.31	18.50
Trustees' Projections	4.63	6.14	13.33	17.68
Difference Between the Projections	0.01	-0.28	0.02	-0.82
Percentage Difference Between the Projections	0	-4	0	-4

Sources: Congressional Budget Office; Social Security Trustees.

These projections incorporate the assumption that spending for Social Security continues as scheduled even if its trust funds are exhausted.

Tax revenues consist of payroll taxes and income taxes paid on benefits. Outlays consist of scheduled benefits and administrative costs, which typically account for less than 1 percent of program costs.

GDP = gross domestic product.

a. The key components of nominal GDP growth are the labor force participation rate, the unemployment rate, the rate of productivity growth, and the inflation rate

b. Other changes include the differences in estimated income taxes paid on Social Security benefits and the interactions among the four major inputs: earnings subject to Social Security taxes, key components of nominal GDP growth, demographics, and real (inflation-adjusted) interest rates.

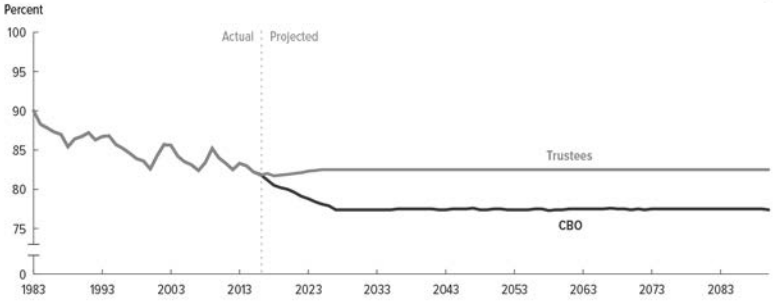
Average benefits per recipient are projected to continue to increase because of future increases in the earnings that are the basis of those benefits. Other things being equal, that relationship would tend to keep total benefits roughly stable as a percentage of GDP. However, as a larger share of the baby-boom generation reaches retirement age and as longer life spans lead to longer retirements, a significantly larger portion of the population will draw benefits. Those developments combine to cause the total amount of benefits scheduled to be paid under current law to grow faster than the economy, in CBO's projections.

Almost all Social Security revenues come from a payroll tax. Consequently, the program's total revenues depend in large part on the share of earnings subject to that tax. Payroll tax revenues as a percentage of GDP decline in CBO's projections, mostly because the taxable share of earnings is expected to continue to fall, furthering the decline of the past several decades. The decline in payroll taxes more than offsets a small increase in income taxes on Social Security benefits—the other source of Social Security revenues—that results from increases in the number of Social Security recipients whose benefits are subject to taxation, the amount of their benefits that is taxed, and their average income tax rates.

CBO updates its projections each year to incorporate the best information available from the research community as well as feedback on the agency's analytical approach and other improvements in modeling. As a result of updates in the past year, for instance, the agency's estimate of the actuarial balance in 2016 is slightly more negative than it was in 2015. Contributing factors included lower projected interest rates, GDP, and taxable payroll amounts; changes to projected educational attainment and to the ages at which future retirees choose to claim Social Security benefits; and the effects of the one-year shift in the

Figure 3.

Share of Covered Earnings Below Social Security's Taxable Maximum



Sources: Congressional Budget Office; Social Security Trustees.

Social Security payroll taxes are levied only on earnings up to a maximum amount ($118,500 in 2016), which increases annually with the national average wage index except in years when there is no cost-of-living adjustment to benefits. Covered earnings are those received by workers in jobs subject to Social Security payroll taxes. The government collects payroll taxes on the earnings of most workers, although a small group of workers—mostly in state and local government or in the clergy—are exempt. The taxable share of covered earnings affects revenues of the Social Security system as well as benefits paid in future years (because taxable earnings are used to calculate benefits).

projection period. Those factors were partially offset by revised demographic projections and lower projected rates of disability incidence.[5]

What Is the Role of Taxable Earnings in the Projections?

The amount of earnings subject to the Social Security payroll tax, as a percentage of GDP, depends largely on the share of total earnings that are at or below the maximum taxable amount ($118,500 in 2016), the share of total compensation that is paid as earnings, and total compensation as a share of GDP. The current year's taxable earnings are the primary determinant of the program's revenues for that year, but those earnings also figure in the calculation of benefits to be paid in the future. Thus, a larger amount of taxable earnings initially increases revenues and later increases spending. In the calculation of the actuarial balance, earlier years receive greater weight than later years—so a larger amount of projected taxable earnings outweighs the effect of larger benefits in the future and improves the actuarial balance.

In CBO's projections, the portion of earnings subject to the Social Security payroll tax falls from 82 percent in 2015 to below 78 percent by 2026 and remains near that level thereafter (see Figure 3). The share of compensation that workers receive as earnings is projected to remain near 81 percent through 2046; it then declines through 2090. Total compensation rises from 61.6 percent of GDP in 2015 to 62.0 percent in 2026 and remains at that level in later years. The amount of earnings subject to the Social Security payroll tax also depends to a lesser extent on the ratio of covered earnings to total earnings and other factors. Covered earnings are those received by workers in jobs subject to Social Security payroll taxes.[6] In CBO's projections, taxable earnings measured as a percentage of GDP fall from 35.7 percent in 2015 to 33.9 percent by 2026 and to 31.6 percent by 2090.

5. Changes to CBO's Social Security projections are described each year in the agency's long-term budget outlook and in a publication with additional information about Social Security. See Congressional Budget Office, *The 2016 Long-Term Budget Outlook* (July 2016), Appendix B, www.cbo.gov/publication/51580, and *CBO's 2015 Long-Term Projections for Social Security: Additional Information* (December 2015), www.cbo.gov/publication/51047.

6. The government collects payroll taxes on the earnings of most workers, although a small group of workers—mostly in state and local government or in the clergy—are exempt.

Comparison With the Trustees' Projections

The Trustees' estimates of overall taxable earnings as a percentage of GDP—which peak at 36.7 percent in 2025 before falling to 34.8 percent by 2090—are higher than CBO's estimates for two main reasons:

- The Trustees estimate that the portion of earnings covered by Social Security on which payroll taxes are collected will increase slightly between 2016 and 2025, in contrast to CBO's estimate of a falling share, and remain constant at 82.5 percent thereafter. Their projections suggest that they anticipate that the growth rate of earnings will be similar for those with earnings above the taxable maximum and others.
- The Trustees' projections of compensation as a share of GDP rise more than CBO's over the next decade, reaching 63.3 percent in 2025, after which that share remains unchanged.

The Trustees' estimate of the proportion of compensation that will be paid as earnings is similar to CBO's for the next four decades and larger than CBO projects thereafter.

If CBO adopted the Trustees' projections of taxable earnings—specifically, for the share of earnings subject to the payroll tax, the share of total compensation paid as earnings, and compensation as a share of GDP—but did not allow those changes to affect projections of other factors, then its estimates of payroll tax receipts and, eventually, benefits paid also would be higher. (Although adopting that projection would improve the projections for Social Security's finances, other aspects of the federal budget would be affected. For example, individual income tax receipts would decrease more than payroll tax receipts would increase because a smaller share of income would be subject to higher income tax rates.) CBO's resulting projection of the 75-year actuarial balance would improve by 0.14 percent of GDP, accounting for 23 percent of the difference between CBO's and the Trustees' projections. Most of that reduction is attributable to differences in projections of the share of earnings subject to the payroll tax.

The Basis of CBO's Projections

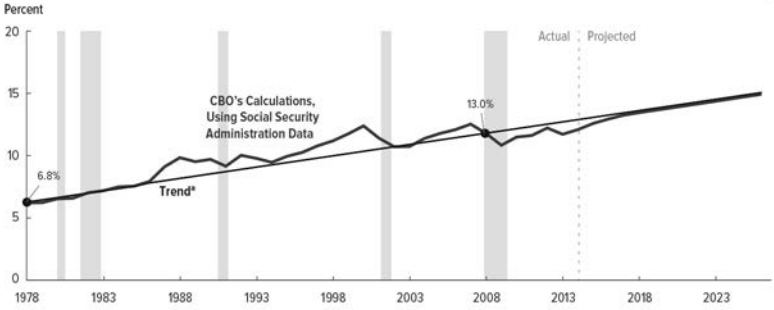
CBO's projections of the amount of earnings subject to the Social Security payroll tax are derived from projections of the entire distribution of compensation that underlie the agency's revenue projections. Those projections reflect an expectation that earnings will grow faster for higher-income people than for others during the next decade—as they have over the past several decades—and that the earnings of all taxpayers will grow at similar rates thereafter. CBO's projections of earnings as a share of compensation reflect trends in the cost of health insurance and incorporate expected responses to future taxes on health insurance. The projections of compensation as a share of GDP reflect the distribution of income among various categories, such as labor income and domestic economic profits. Each of those projections is uncertain.

The Share of Earnings Subject to the Payroll Tax. Social Security payroll taxes are levied only on earnings up to the taxable maximum, which increases annually with the national average wage index except in years when there is no cost-of-living adjustment to benefits. About 6 percent of earners have earnings above the taxable maximum. Earnings below that amount are taxed at a combined rate of 12.4 percent, shared equally by the employer and employee (self-employed workers pay the full amount); no tax is paid on earnings above the cap. The taxable maximum has remained a nearly constant proportion of the average wage since the early 1980s, but because earnings have grown faster for higher earners than for others, the portion of covered earnings on which Social Security payroll taxes are collected fell from 90 percent in 1983 to 83 percent in 2014.

Most of the historical decline in the share of earnings covered by the payroll tax has been caused by an increase in the share of earnings for workers in the top percentile of the income distribution; that share rose steadily in the 1980s and 1990s but since then has fluctuated with conditions in the economy (see Figure 4). The share fell during the recession that began in 2007 and has not returned to its prerecession level. In CBO's view, the data from 2008 through 2014 about the top 1 percent are probably not informative about long-term trends because the 2007–2009 recession was unusually severe, especially for high-income earners, and the subsequent recovery was unusually slow. It also is likely that many high-income workers shifted earnings from 2013 into 2012 to avoid the tax rate increases that took effect in 2013. The earnings share of the top 1 percent rose in 2014, although it

Figure 4.

Share of Wage and Salary Income Earned by the Top 1 Percent of Earners



Sources: Congressional Budget Office based on data from Kopczuk, Saez, and Song (2010) and Social Security Administration.

For 1978 to 1989, estimates are based on tabulations of individual earnings records, as reported in supplemental data to Wojciech Kopczuk, Emmanuel Saez, and Jae Song, "Earnings Inequality and Mobility in the United States: Evidence From Social Security Data Since 1937," *Quarterly Journal of Economics*, vol. 125, no. 1 (February 2010), pp. 91–128, http://dx.doi.org/10.1162/qjec.2010.125.1.91. For 1990 to 2014, the estimates are based on earnings as reported by employers on Internal Revenue Service Forms W-2 and tabulated by the Social Security Administration, "Social Security Online, Automatic Increases: Wage Statistics for 2014" (accessed September 16, 2016), www.ssa.gov/cgi-bin/netcomp.cgi?year=2014. To account for differences in methodology between the two series, CBO adjusted the 1978–1989 estimates for the average difference in years for which data were available for both series (1990–2004).

CBO's projections are extrapolations based on data from the Current Population Survey and from individual income tax returns. The trends found in those data are similar to the trends found in individual earnings records.

The vertical bars indicate the duration of recessions, each of which extends from the peak of a business cycle to its trough.

a. The line connects data points for each group's share of earnings in 1978 and 2008 and extrapolates the trend thereafter.

remained below the longer-term trend. CBO attributes some of that weakness to the fact that the economy was still operating appreciably below its potential in 2014. Preliminary data for 2015 suggest that the earnings share of the top 1 percent rose again last year. For its projections of earnings shares over the coming decade, CBO relies on its review of longer-term trends. Specifically, the agency expects that the earnings share of the top 1 percent will rise, reaching the level suggested by extrapolation of the trend from 1978 to 2008 over the next few years and then following that trend for the remainder of the coming decade.

A smaller amount of the historical decline in the share of earnings covered by the payroll tax has been caused by an increase in the share of earnings for workers in the 96th to 99th percentiles of the earnings distribution. Their earnings share has grown steadily—by about one-half of a percent per decade—since the late 1970s, when the relevant data began to be collected. That trend, which CBO projects will continue for the next 10 years, is expected to contribute to the declining share of earnings subject to the payroll tax over the same period.

The Share of Compensation Paid as Earnings. Workers' total compensation consists of taxable earnings and nontaxable benefits, such as employers' contributions to health insurance and pensions. Over the years, the share of total compensation paid in the form of earnings has slipped—from about 90 percent in 1960 to about 81 percent in 2015—mainly because the cost of health insurance has risen more quickly than has total compensation.[7]

CBO expects that trend in health care costs to continue, and that by itself would further decrease the proportion of compensation that workers receive as earnings. However, starting in 2018, the Affordable Care Act will impose an excise tax on some employment-based health insurance premiums above specified amounts. Some

7. For more details, see Congressional Budget Office, *How CBO Projects Income* (July 2013), www.cbo.gov/publication/44433.

employers and workers will respond by shifting to less expensive plans, thereby reducing the share of compensation consisting of insurance premiums and increasing the share that consists of earnings. CBO projects that, for a few decades, the effects of the tax on the mix of compensation will roughly offset the effects of rising costs for health care; after that, the effects of rising health care costs will outweigh those of the excise tax, and the share of compensation paid as earnings will decline.

Compensation as a Share of GDP. From 1960 to 2000, compensation as a share of GDP varied, averaging 62.9 percent. That share has fallen since, reaching 61.6 percent last year. Although CBO projects that compensation as a share of GDP will rise slightly over the next decade as the economy strengthens, the agency expects some factors that have depressed that share since 2000 to continue. One such factor is globalization, which has tended to move the production of labor-intensive goods and services to countries with labor costs that are lower than those in the United States. Another factor is technological change, which may have increased returns on capital more than returns on labor. As a result of such factors, in CBO's projections, compensation as a share of GDP does not return to its historical average but equals 62.0 percent by 2026 and remains at that level thereafter.

Uncertainty. Projections of taxable earnings are subject to considerable uncertainty. A body of research has considered the ways that many factors could contribute to changes in inequality in earnings and other compensation. For instance, changes in the size and structure of industries and businesses will probably continue to affect earnings distributions. In CBO's projections, the supply of workers with more education increases more quickly than the supply of workers with less education, and that could cause the premium paid to workers with more education to rise more slowly than it has in the past or to stop rising altogether in the long term. That process would tend to slow the growth of earnings for high earners. However, a lack of consensus about the relative importance of those and other factors has made the projections especially uncertain. CBO continues to refine its methods for projecting taxable earnings and to evaluate new data as they become available.

What Is the Role of the Key Components of Nominal GDP Growth in the Projections?

The size of the economy significantly affects Social Security's revenues and spending. When nominal GDP is larger, Social Security receives more revenues initially, and then later—when beneficiaries retire—it pays higher benefits. Higher nominal GDP improves Social Security's actuarial balance because earlier years receive greater weight in the calculation of that balance. In CBO's projections, nominal GDP growth averages 4.1 percent over the 2016–2046 period; it is slightly stronger in later years.[8] This section focuses on key components of nominal GDP growth: the rates of labor force participation, unemployment, productivity growth, and inflation.

The rate of inflation also affects the actuarial balance. In addition to raising nominal GDP, a higher rate of inflation raises nominal interest rates, and those higher interest rates improve the actuarial balance. (For discussion of why that occurs, see the section on the role of real interest rates in the projections.)

Comparison With the Trustees' Projections

The Trustees project average annual growth in nominal GDP to be 0.7 percentage points faster than CBO does over the next 10 years and slightly faster over the subsequent two decades; after that, the projections are similar (see Figure 5). As a result, the Trustees project total economic output that is 7.4 percent higher after a decade and 13.4 percent higher by 2046 than CBO does; that difference increases slightly by the end of the 75-year projection period. The faster growth through 2046 is the result of several factors:

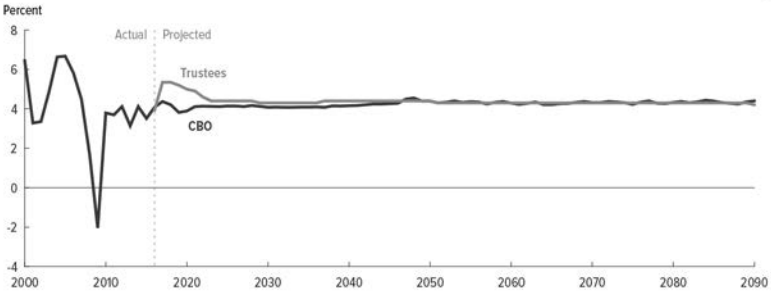
- Most important, the Trustees project that the labor force participation rate will rise until 2021 before slowly declining, whereas CBO projects a continuous decline in participation that is attributable largely to projected changes in demographics (see Figure 6);
- The Trustees' projection of GDP growth suggests stronger productivity growth than CBO's does through the mid-2040s; and
- The Trustees project faster growth in prices than CBO does.[9]

8. Through 2046, the projections incorporate the adverse economic effects of rising federal debt and marginal tax rates. After 2046, they do not account for such effects.

9. The analysis in this section includes the effect of higher inflation on nominal interest rates.

Figure 5.

Growth of Nominal Gross Domestic Product



Sources: Congressional Budget Office; Social Security Trustees.

The Trustees also project that the unemployment rate will stabilize at a level notably above the current rate, whereas CBO projects that the unemployment rate will stay roughly unchanged. That higher unemployment rate in the Trustees' projections slightly offsets the other factors that raise nominal GDP relative to CBO's estimates. That occurs because, under CBO's projections, a higher unemployment rate implies that a smaller portion of the labor force is employed.

If CBO adopted the Trustees' projections for rates of labor force participation, unemployment, and inflation and also set the rate of productivity growth so that its projection of nominal GDP matched that of the Trustees, but the agency did not allow those changes to affect projections of other factors, then the actuarial balance would improve by 0.13 percent of GDP, accounting for 22 percent of the difference between CBO and the Trustees.

The Basis of CBO's Projections

CBO's forecast of nominal GDP growth over the long term is based on projections of trends in real GDP and inflation. Projections of real GDP growth are based on such underlying factors as growth in the use of labor—which is the result of determinants that include labor force participation and the unemployment rate—and labor productivity, or average real output per hour of labor. (Real GDP is also affected by the size and age structure of the population, discussed in the next section.) The nominal GDP growth rate equals the real GDP growth rate plus the rate of inflation. Each component is subject to considerable uncertainty.

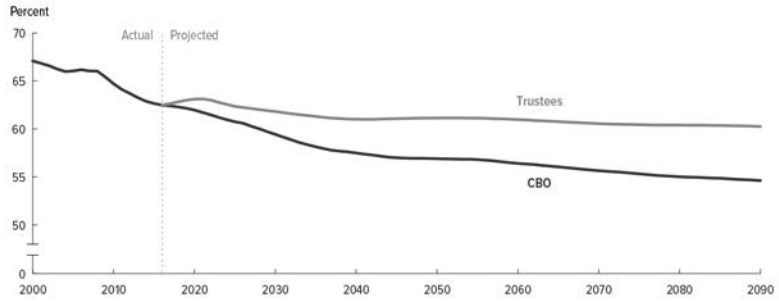
CBO's current projections of nominal GDP growth rates are significantly slower than the past three decades' average of 4.8 percent. The difference is attributable mainly to factors that are projected to constrain growth in real GDP and, to a lesser degree, to result from lower inflation. Together, those factors point to a slowdown in nominal GDP growth of a little more than one-half of a percentage point relative to the rates of the past three decades.

Labor Force Participation. Declining participation in the labor force has been a major factor slowing growth in real GDP, a trend that CBO projects will continue. The rate of labor force participation has dropped noticeably in recent years, from 67.1 percent in 2000 to 62.5 percent today. It will continue to decline to 60.6 percent in 2026 and further in later years, CBO projects.[10] In particular, the growing retirement of baby boomers is expected to lead to continued declines in labor force participation. Today, the number of people who are age 65 or older is one-quarter the size of the population ages 20 to 64; 75 years from now, CBO projects, the older group will be nearly one-half the size of the younger group. In addition, CBO anticipates that there will be slightly less participation in the labor force by younger workers and by less educated workers than there has been in the past, as long-term trends for those groups continue.

10. In contrast, the Trustees project that the labor force participation rate will rise to 63.1 percent in 2020 and 2021 before declining.

Figure 6.

Labor Force Participation Rate



Sources: Congressional Budget Office; Social Security Trustees.

The labor force participation rate is the percentage of people in the civilian noninstitutionalized population who are age 16 or older and either working or actively seeking work.

The forces that dampen participation will be modestly offset by a pair of trends working in the opposite direction, in CBO's view. First, increasing longevity will lead people to work longer: In the coming decades, the average person is likely to work about three months longer for each additional year of life expectancy. Second, the population is becoming more educated, and workers with more education tend to stay in the labor force longer than do people with less education.

The Unemployment Rate. In CBO's projections, the unemployment rate rises slightly over the next decade from its average of 4.9 percent for the first half of 2016 to 5.0 percent by 2020. The change is anticipated as business cycle factors that currently influence the labor market begin to abate, and—in particular—as the unemployment rate moves in line with underlying trends. The unemployment rate is projected to fall slightly over the longer term because of changes in demographics and education: Older and more educated workers tend to have lower rates of unemployment, so the overall unemployment rate is expected to decline both as the labor force ages and as it becomes increasingly more educated. In CBO's projections, that rate declines to 4.8 percent by 2046 and then remains at that level.[11]

Productivity Growth. In CBO's projections, growth in labor productivity will be modestly lower than its average over long periods before the recession of 2007 to 2009, averaging 1.6 percent between 2016 and 2026 and then increasing to 1.8 percent in later years.[12] The rising budget deficits projected under current law would slow the growth of the capital stock and therefore capital services, which contribute to labor productivity. CBO also projects that total factor productivity (or output per unit of combined labor and capital services) will grow slightly more slowly than its historical average—in part because, with the exception of a period of rapid growth in the late 1990s and early 2000s, productivity has tended to grow more slowly in recent decades than it has averaged since the 1950s and 1960s. Total factor productivity growth will average 1.3 percent between 2016 and 2026 and remain at that level in later years, CBO projects.

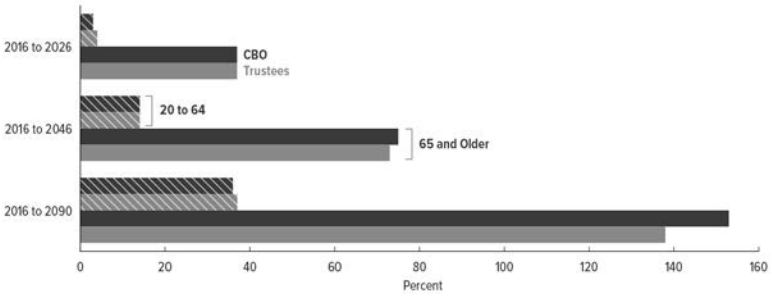
Inflation. CBO projects that the annual rate of inflation for all final goods and services produced in the economy, as measured by the rate of increase in the GDP price

11. The Trustees project that the unemployment rate will increase to 5.6 percent in 2024 and 2025 before settling at 5.5 percent for the rest of the projection period.

12. The Trustees project productivity growth for the U.S. economy overall, and define it as the ratio of real GDP to hours worked by all workers—a measure similar in concept to CBO's reported measure. That growth averages 1.8 percent between 2016 and 2026 and then 1.7 percent in later years in the Trustees' projections.

Figure 7.

Increase in Population in Different Age Groups, 2016 to 2090



Sources: Congressional Budget Office; Social Security Trustees.

index, will average 2 percent over the next 75 years. That rate is consistent with the Federal Reserve's longer-run goal for inflation and is broadly in line with widely held expectations—implying that the GDP price index will increase slightly more slowly than it has over the past three decades. The consumer price index, another gauge of inflation and the one that is used to adjust Social Security benefits for increases in the cost of living, is projected to rise at an average rate of 2.4 percent over the same period.[13] The 0.4 percentage-point difference is generally equal to the historical difference between the two indexes, which are based on the prices of different sets of goods and services and use different methods of calculation.

Uncertainty. Estimates of economic activity over the next 75 years are subject to a great deal of uncertainty. For example, the nation could experience faster growth in productivity than is reflected in CBO's projections, either steadily (as a result of ongoing gains from the integration of information technology into the economy, for example) or more suddenly (from a technological breakthrough, such as the development of a new source of energy). Conversely, the growth of productivity could be slower than projected (if, for example, technological innovation or the diffusion of previous technological innovations throughout the economy diminished more than expected). CBO's projections of productivity growth and other determinants of economic growth are estimated to be in the middle of the distribution of potential outcomes.

What Is the Role of Demographics in the Projections?

Social Security's revenues depend to a large degree on the size of the labor force, which is related to the number of adults between the ages of 20 and 64, and its outlays are closely linked to the nation's population age 65 or older. The actuarial balance improves when a larger segment of the population pays into the trust funds that support Social Security and when a smaller portion receives benefits from the program.

In CBO's projections, the number of people between the ages of 20 and 64 will increase by 3 percent between now and 2026, by 14 percent between now and 2046, and by 36 percent between now and 2090 (see Figure 7). The number of people age 65 or older, by contrast, will increase by 37 percent between now and 2026, by 75 percent between now and 2046, and by 153 percent between now and 2090. CBO bases its population estimates on demographic projections that incorporate recent population data and estimates of future rates of fertility (births), immigration (people entering the country, on net), and mortality (deaths).

13. The Trustees project higher inflation rates. In their projections, the increase in the GDP price index averages 2.2 percent over the 75-year projection period, and growth in the consumer price index averages 2.6 percent.

Comparison With the Trustees' Projections

The Trustees project that the total fertility rate will be slightly higher, the net rate of immigration will be lower, and the mortality rate will decline slightly more slowly than CBO estimates. The Trustees' projection for the increase in the size of the 20–64 age group over the next 75 years is similar to CBO's projection. However, between now and 2090, the Trustees project a 138 percent increase in the number of people age 65 or older, which is 16 percentage points less than CBO's projection. All told, compared with CBO's projections, the Trustees expect a similar number of working-age people and fewer elderly people over the period.

If CBO adopted the Trustees' demographic projections, but the agency did not allow those changes to affect projections of other factors, then the actuarial balance would improve by 0.09 percent of GDP, accounting for 15 percent of the difference between the Trustees' and CBO's projections.

The Basis of CBO's Projections

CBO anticipates that the annual growth rate of the U.S. population will decline gradually from about 0.8 percent in 2016 to about 0.5 percent 30 years from now and to slightly less than 0.5 percent 75 years from now. In CBO's projections, the population not only grows more slowly but also becomes older, on average, relative to past trends because of changes in fertility, immigration, and mortality. Each of those changes is uncertain.

Fertility. Fertility rates often decline during recessions and rebound during recoveries. However, after the 2007–2009 recession, the U.S. fertility rate dropped (it was 2.1 children per woman in 2007), and it has remained below 1.9 since then. CBO estimates a total fertility rate of 1.9 for the 2016–2090 period.[14] (That rate is the average number of children that a woman would have in her lifetime if, at each age of her life, she experienced the birthrate observed or assumed for that year and if she survived her entire childbearing period.) Although CBO projects a total fertility rate, in its long-term model, the likelihood that a particular woman will have a child depends on such factors as that woman's education, marital status, immigration status, and childbearing history.

Immigration. CBO's immigration projections match those underlying its 10-year baseline: The net annual immigration rate (which accounts for all people who either enter or leave the United States in any year) is roughly constant from 2017 through 2026 and slightly higher than in the previous few years to account for the projected strengthening of the U.S. economy. After 2026, that rate is projected to decline slowly until 2036, when it is expected to equal the rate projected by the Census Bureau.[15] (CBO anticipates that net annual immigration will continue to match the Census Bureau's projections thereafter.) On that basis, the rate of net annual immigration to the United States is projected to be 4.0 per thousand people in the U.S. population in 2026, 3.7 in 2046, and 3.6 in 2090. Although that rate declines, CBO projects that the total population will rise faster, so the net annual number of immigrants is anticipated to rise from 1.4 million people in 2026 to 1.5 million people in 2046 and to 1.8 million in 2090.[16]

Mortality. The mortality rate generally declined in the United States from 1950 to 2012, the period on which CBO bases its projections. Over that time, the mortality rate has generally improved more quickly for younger people than for older people. In particular, a recent review of the data by CBO suggests that the differences in relative improvements in mortality exhibited by various age groups are significant and likely to continue. For example, mortality rates for people under the age of 15 declined by an average of more than 2½ percent per year between 1950 and 2012; mortality rates for people over the age of 80 declined by an average of less than 1 percent per year over the same period. CBO projects that mortality rates for each five-year age group will continue to decline at the average pace exhibited over the 1950–2012 period.

CBO projects that life expectancy at age 65 will be 21.6 years in 2046 and 24.6 years in 2090; in 2016, life

14. CBO's projection is consistent with that recommended by the Social Security Advisory Board's 2015 Technical Panel on Assumptions and Methods. See 2015 Technical Panel on Assumptions and Methods, *Report to the Social Security Advisory Board* (September 2015), p. 9, http://go.usa.gov/cJYR5 (PDF, 3.4 MB). The Trustees project a slightly higher total fertility rate of 2.0 children per woman.

15. See Census Bureau, "Population Projections, 2014 National Population Projections: Summary Tables," Table 1 (accessed September 16, 2016), http://go.usa.gov/x33DB.

16. The Trustees project net immigration of 1.4 million people in 2026, 1.3 million in 2046, and 1.2 million in 2090.

expectancy at age 65 is 19.4 years.[17] Once CBO projects average mortality rates for men and women by age group, it incorporates differences in those rates on the basis of marital status, education, and lifetime household earnings. (For people under 30, the mortality projections account for age and sex only.) CBO projects a greater life expectancy for people who are married, have more education, and are in higher income groups.[18]

Uncertainty. Although in the past, demographic trends have changed more slowly over long periods than have some other major inputs into CBO's projections (such as real interest rates), population projections are still subject to uncertainty. For example, mortality rates have declined over the past half century, and in CBO's projections, that trend continues. Historically, the average annual change in the mortality rate has varied by about 1 percentage point for men and for women during the 25-year periods beginning with 1942 to 1966 and ending with 1986 to 2010. In CBO's view, the projections reflect the middle of the distribution of possible outcomes for all demographic factors, including mortality rates.

What Is the Role of Real Interest Rates in the Projections?

Interest rates affect measures of the system's finances in two particular ways. First, they determine the interest received on balances in the Social Security trust funds—and thus affect the exhaustion of the trust funds. Second, in the calculation of the actuarial balance, they are used to compute the present values of future cash flows. (Present values depend on an interest rate—known as the discount rate—that is used to translate future income or payments into current dollars.) Thus, a higher interest rate improves the actuarial balance because cash flows in future years—in which large shortfalls between outlays and revenues are projected—receive less weight in the calculations. (A nominal interest rate equals the real interest rate plus the rate of inflation as measured by the consumer price index. The analysis in this section focuses on real interest rates because the effects of inflation were included in the analysis of the key components of nominal GDP growth, discussed above.)

Interest rates on federal borrowing increase over the next few years in CBO's projections, as the slack in the economy continues to diminish, inflation returns to the Federal Reserve's 2 percent target, and the central bank gradually reduces the extent to which its monetary policy supports economic growth. The real rate on 10-year Treasury notes (calculated by subtracting the rate of increase in the consumer price index from the nominal yield on those notes) has averaged 0.8 percent since 2009 and will reach 1.7 percent in 2026, CBO estimates. After that, the rate continues to rise, reaching 2.3 percent in 2046 and remaining at that level indefinitely.

In CBO's projections, the special-issue bonds issued by the trust funds generally earn interest at rates that match the 10-year rate. Because interest rates on newly issued bonds are expected to increase in coming years, CBO projects that the average interest rate earned by all bonds held by the Social Security trust funds will be slightly lower than the 10-year rate during the next decade and a half but the same as the 10-year rate thereafter. For the discount rate in the calculation of the actuarial balance, CBO uses the 10-year Treasury note rate.[19]

Comparison With the Trustees' Projections

The Trustees use the average interest rate on special-issue bonds held in the trust funds as the discount rate.[20] That real rate—that is, the nominal rate minus the inflation rate as measured by the consumer price index—is 2.4 percent in 2016 and then increases from 0.4 percent in 2017 to 2.7 percent in 2031 and remains at that level thereafter, according to CBO's calculations using the Trustees'

17. Life expectancy as used here is period life expectancy—the amount of time that a person in a given year would expect to survive beyond his or her current age on the basis of that year's mortality rates for various ages. CBO's projection of life expectancy in 2090 is longer than the Trustees' projection of 23.6 years at age 65 but shorter than the projection of 25.3 years at age 65 recommended in the report of the 2015 Technical Panel on Assumptions and Methods, *Report to the Social Security Advisory Board* (September 2015), pp. 13–20, http://go.usa.gov/cJYR5 (PDF, 3.4 MB).

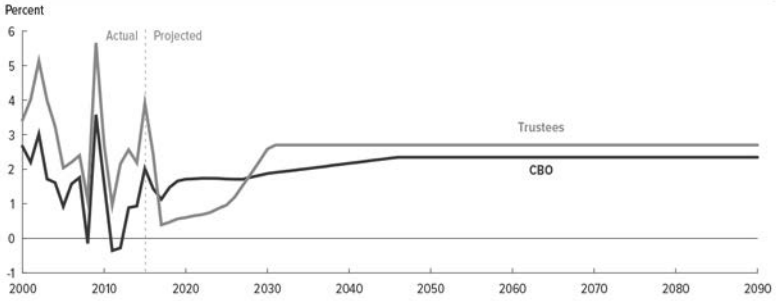
18. For more information about mortality differences among groups with different earnings, see Congressional Budget Office, *Growing Disparities in Life Expectancy* (April 2008), www.cbo.gov/publication/41681; and Julian P. Cristia, *The Empirical Relationship Between Lifetime Earnings and Mortality*, Working Paper 2007-11 (Congressional Budget Office, August 2007), www.cbo.gov/publication/19096.

19. If CBO used its projection of the average interest rate earned by all bonds held by the Social Security trust funds as the discount rate instead of its projection of the rate on the 10-year Treasury note, the 75-year actuarial balance, measured relative to GDP, would worsen by 0.02 percentage points.

20. That rate equals the rate on newly issued bonds in 2031 and later years.

Figure 8.

Real Interest Rate Used to Calculate the 75-Year Actuarial Balance



Sources: Congressional Budget Office; Social Security Trustees.

Actual rates and CBO's projections of real (inflation-adjusted) interest rates consist of the nominal rate on 10-year Treasury notes minus the rate of increase in the consumer price index. The Trustees' actual and projected rates are the average real interest rate on special bonds held in the trust funds until 2031; thereafter, the projections are for the real interest rate on special bonds each year. That rate plus the rate of inflation as measured by the consumer price index equals the nominal interest rate used in the calculation of the actuarial balance.

The actuarial balance is the difference between the present value of annual tax revenues plus the initial trust fund balance, and the present value of annual outlays plus the present value of a year's worth of benefits as a reserve at the end of the period, each divided by the present value of GDP or taxable payroll. (The present value of a flow of revenues or outlays over time is a single number that expresses that flow in terms of an equivalent sum received or paid at a specific time. The present value depends on a rate of interest, known as the discount rate, that is used to translate past and future cash flows into current dollars.)

projections. By contrast, CBO's projections show higher rates until the late 2020s and lower rates thereafter (see Figure 8).

If CBO adopted the Trustees' figure, but the agency did not allow those changes to affect projections of other factors, then the actuarial balance would improve by 0.03 percent of GDP, accounting for 6 percent of the difference between the Trustees' and CBO's projections. (Higher interest rates, however, are not favorable for the federal budget as a whole because they raise the cost of federal borrowing and add to federal budget deficits.)

The Basis of CBO's Projections

CBO expects real interest rates on federal borrowing to be lower in the future than they have been, on average, over the past few decades. The real interest rate on 10-year Treasury notes averaged 3.1 percent between 1990 and 2007.[21] In each year of CBO's projections, however, that rate is at least 0.7 percentage points lower than that average. Nevertheless, real interest rates have been higher and lower than average for sustained periods in the past, and the level of future interest rates is uncertain.

Real Interest Rates. According to CBO's analysis, average real interest rates on Treasury securities will be below their past averages for reasons that include slower growth in the labor force and slightly slower growth of productivity, both of which tend to reduce the rate of return on capital. Furthermore, a greater share of total income is projected to go to high-income households, which will increase saving and make more funds available for borrowing. The premium on risky assets is expected to be

21. CBO uses the 1990–2007 period for comparison because it featured fairly stable expectations of inflation and no severe economic downturns or financial crises. Between 1970 and 2007, the real interest rate on 10-year Treasury notes averaged 3.2 percent; the average from 1953 to 2007 was 2.9 percent. Historical inflation rates are taken from the consumer price index, adjusted to account for changes over time in the way that the index measures inflation. See Bureau of Labor Statistics, "CPI Research Series Using Current Methods (CPI-U-RS)" (April 13, 2016), www.bls.gov/cpi/cpiurs.htm.

above its average from 1990 to 2007—boosting relative demand for Treasury securities, increasing their prices, and thereby lowering their interest rates. And net inflows of capital from other countries, measured as a percentage of GDP, also are expected to be higher, making more funds available for borrowing.

CBO expects the term premium—the extra return paid to bondholders for the added risk associated with holding long-term bonds—to be smaller, on average, than it was before the late 1990s. Over the past two decades, the prices of long-term Treasury securities and of risky assets in the United States have moved in opposite directions: Periods with weaker economic growth and lower returns in the stock market have been associated with increases in the prices of Treasury securities, which was not the case before the early 2000s. As a result, investors trying to protect themselves from adverse economic surprises may be more likely than they were in the past to demand long-term Treasury securities. Investors also may have increased their demand for long-term investments, such as Treasury securities, that offer protection from unexpectedly low inflation. All together, CBO anticipates that greater demand for long-term Treasury securities will result in a term premium and long-term interest rates that are lower than they were before the late 1990s.

Other factors are projected to boost real interest rates, although not enough to offset the opposite forces noted above. Federal debt, for example, is projected to grow as a percentage of GDP, increasing the supply of Treasury securities.[22] The ratio of older people, who will be drawing down their savings, to younger workers, who are in their prime saving years, will be greater than it was before. That shift will decrease total saving and make less money available to borrowers. At the same time, a larger share of income is projected to come from capital, increasing returns on capital assets with which Treasury securities compete to attract buyers in financial markets.

In addition to considering those factors that affect interest rates, CBO relies on information from financial markets, which in recent years has tended to lower the agency's projections of interest rates. For example, the current rate on long-term Treasury securities is determined by investors' expectations for interest rates on shorter-term securities several years into the future. That market forecast informs CBO's assessment of market expectations for the risk premium and for investment opportunities in the United States and abroad, and it points to considerably lower interest rates well into the future relative to those of recent decades.

Uncertainty. Some factors mentioned above are easier than others to quantify. For instance, the effect of labor force growth and rising federal debt can be estimated from available data, theoretical models, and estimates in the literature. But the extent to which other factors will affect interest rates is more difficult to compute. A shift in preferences for low- rather than high-risk assets is not directly observable, for instance. And although the distribution of income is observable, neither models nor empirical estimates offer much guidance for quantifying its effect on interest rates. Moreover, current interest rates are not a reliable indicator of investors' expectations about interest rates over the long term, in part because maturities of most of the government's outstanding debt securities are much shorter than the period that is the focus of CBO's long-term projections. In light of those sources of uncertainty, CBO relied on economic models, the research literature, and other information to guide its assessments of the effects of various factors on interest rates over the long term.

This testimony was prepared by Charles Pineles-Mark, Michael Simpson, and Julie Topoleski, with contributions from Stephanie Hugie Barello, Geena Kim, Marina Kutyavina, and Xiaotong Niu and with guidance from Jeffrey Kling. Comments were provided by Mark Booth, Molly Dahl, Ed Harris, Jonathan Huntley, John McClelland, Noah Meyerson, Robert Shackleton, Emily Stern, and Jeffrey Werling. In keeping with the Congressional Budget Office's mandate to provide objective, impartial analysis, this testimony contains no recommendations.

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Keith Hall
Director

22. Through 2046, CBO's interest rate projections reflect the effect of rising federal debt. After 2046, when interest rates are assumed to remain constant, they do not account for that effect.

Chairman JOHNSON. We will now turn to questions, and as is customary for each round of questions, I will limit my time to 5 minutes and ask my colleagues to also limit their questioning time to 5 minutes as well.

We all know experts aren't going to agree exactly. In fact, they never do. You both represent well-respected organizations that do good work, but given these huge differences, I just don't know how you both can be right. Can either one of you tell me?

Mr. HALL. I am happy to start. Let me start out with how we are the same. Both projections show a system with significant financial shortfalls. Both CBO and the Trustees expect the combined trust funds to be exhausted in the second decade of the projection, but we differ in our estimate of the cost relative to GDP. The Trustees' forecast of costs is about 4 percent lower than CBO's, and their forecast of income is about 7 percent higher. So we do have a difference.

But I do want to stress that there is uncertainty. All projections are uncertain. And to give you an idea, we haven't done it this year yet, but last year, when we projected an actuarial balance of negative 1.45 percent of GDP, we did an analysis looking at the historical variations and the variables, and we put out an 80-percent certainty range. We think we are 80 percent certain within a certain range. That range was negative 0.8 percent of GDP to 2.2 percent of GDP. So that is a pretty significant range.

Mr. GOSS. I would just want to add, on certainty, absolutely the only thing we know for sure is that any point estimate will be wrong with almost certainty in the future, so we really do come up with the best possible projection we can here. As I mentioned initially, I think one of the most important things that we try to go for is to have a stability and have only incrementalism in the changes because we understand that if you all are going to be making modifications to this program and other programs, having the goal posts moving around is really, really kind of a problem.

Dr. Hall mentioned something about the way that we project benefits and the way CBO does. I mean, I would just remind, back in 2004, when CBO had only half as large a deficit as we did, it was suggested by folks at CBO at the time that, in fact, we were projecting benefits to be too high at that time, and that is why we had a larger deficit. We believe that that differential kind of dissipated over 5 or 6 years. Now, through methodologies, it appears as though CBO is suggesting we are projecting benefits too low.

So we have been very, very consistent the way we are approaching things, and I think we have a pretty good track record on making projections. You will probably recall, for example, the reserve depletion dates for the DI program, which back at the time of the 1994 reallocation, we were projecting around 2016. Well, lo and behold, it pretty much came out to be around that before the reallocation that you all enacted just last year.

Chairman JOHNSON. Have you all changed the way you look at things?

Mr. HALL. We have over time. And I suppose our philosophy is a bit different. Our goal is to be independent and objective and offer the best estimate available, and so we look at a lot of things. We look at historical data. We look at other people's forecasts. We

vet things with our panel of advisers. We look at what the Social Security technical panel says. And we look at literature. And we make judgments based on this. And things change over time.

I think one of the difficulties right now is coming off the Great Recession, in general, some things have changed permanently; some things, well, will not change as much. So part of what one has to do, for example, in economic forecasting is sort of decide what is going to revert back to prior to the Great Recession and what has been a permanent change, and of course, we have some significant differences on the demographic side.

Chairman JOHNSON. Well, you all just started doing these in the early 2000s. What made the CBO start doing the estimates as compared to the Trustees?

Mr. HALL. Well, the short answer would be we were asked to, that there was an increased interest and concern with the long-term budgetary implications of current laws. And part of it, of course, is that it was a prelude for us to evaluate any legislation that is aimed at trying to improve the Social Security balance.

Chairman JOHNSON. Well, you talk about a lot of assumptions used in the CBO Social Security estimates. Are these assumptions only used in Social Security projections, or do you use them in other estimates as well?

Mr. HALL. Yeah. Actually, our assumptions are kind of mixed in with a lot of things that we do. For example, the 75-year Social Security projection is built upon the long-term budget outlook projection that we make. So we go from 75 years down to 30 years. We make sure those are consistent. And then that 30 years is based on our 10-year economic and budget forecast. We do that three times a year.

So all three of these things are consistent, and in fact, when we just do regular work on the 10-year budget forecast even, we spend a lot of time looking at changes and variables and changes in things that we think are going to impact the long run.

For example, one of the things that we looked at most recently over the long run is we have done a significant amount of work on labor force participation, and we think that there is looking like there is some significant decline in labor force participation based on cohorts. So, for example, if you look at people who are age 25 to 34 right now, their labor force participation is significantly below other cohorts. Baby boomers had much higher participation, and part of what looks to us like is that that is going to maybe be a permanent impact on labor force participation going forward. So we do these things all the time. It is all mixed in, but we try to be consistent.

Chairman JOHNSON. Okay. Well, thank you very much.

I will recognize Mr. Larson.

Mr. LARSON. Thank you, Mr. Chairman, and let me add, it is great to see you back. What a privilege to serve on a committee that has two American iconic heroes in Sam Johnson and John Lewis. We should all take stock in that, and always good to see you back.

Chairman JOHNSON. Thank you.

Mr. LARSON. And I think it is a great hearing. I think it is going to give us an opportunity to explore, and I have more of a

statement to begin with and I hope which will follow with other questions. But the last time we really constructively as a Congress really looked at Social Security in any meaningful and significant way was in 1983.

This is an insurance program, an insurance program. People talk about this as though it is an entitlement. Yes, you are entitled to your Social Security because you paid for it. It is an insurance program. Has anyone's—in this audience—insurance premiums gone up since 1983 when this was last touched? I dare say that everyone's hand in the audience, if I requested, would go up. Yet Social Security has not been adjusted and yet has not missed a payment, as Javier Becerra was pointing out earlier on.

So what we have here is there are statistics, as has been indicated by two venerated groups, both in the Social Security actuaries and CBO; one doing it over a long period of time, the other since 2004, but both with outstanding results. I think what the American people want to see is, what is Congress going to do? Because you both say that this is based on projections, and those projections depend upon what we are actually going to do.

And I think what we need to do, it is kind of like what the AARP puts out there, you have got to show what your proposal is to—with regard to Social Security. We have to strengthen this program. We have to strengthen it for a number of reasons, largely because of what happened in 2008 when people saw their 401(k)s become 101(k)s, but the only program during that time that remained consistent was, of course, Social Security.

So it is incumbent upon us to make sure that it meets those actuarial standards so they are solvent for the next 75 years. And not only do we have to—and we are constantly arguing up here about whether we have to cut it or increase the premiums, as I like to say.

I don't think we can afford to cut it. All you have to do is go back home and look at your constituents and find out the situation that they find themselves in. What we need to do is expand it and then expand it in a way that makes sense for the American people.

We have a proposal out there that says we should increase the funding by what people receive by 2 percent across the board. We should make sure that no one retires into poverty who has participated in the program. We should make sure that our cost of living, our COLAs, reflect actual cost, and you know what else? We should give people a tax break. We can do all that, but we would have to increase the premium.

Well, how would you increase the premium? Well, under our proposal, we would scrap the cap. Over-$400,000 people would pay, and they would receive more benefits for what they pay in. And then what I truly believe, because there has to be skin in the game for everybody, we increase the contribution by 1 percent, but then phase that in, just like any insurance actuary would do looking at this program, increase it by 1 percent, phase it in over 25 years, which would be .05 percent a year; or for a person making $50,000 a year, be 50 cents a week; or if you bought one of these Starbucks lattes for $4.50, that would represent 9 weeks of Social Security payments.

My point is this: This is an insurance issue that is very solvable actuarially by just making sure that we adjust premiums that haven't been touched since 1983 but do it in a way that is not going to burden anybody; 50 cents a week for someone making $50,000 a year is not going to be a significant burden. And when you look at what we get in terms of Social Security, most importantly its guarantee, then we can combine the genius of what we have through insurance, a private sector concept, tax cuts, which I think everybody on the committee enjoys, and then the certainty for which people rely and depend on this, including the number of quarters that you put in, especially if you are female and you have less quarters. This will allow an equalization of that, and I look forward to my questions. I realize I ran over.

Thank you, Mr. Chairman.

Chairman JOHNSON. Thank you. Mr. Dold, you are recognized.

Mr. DOLD. Thank you.

I look forward to going over to Starbucks with you, John. Absolutely.

Mr. Goss, I wanted to just start with you, and again, I think those that are tuning into the hearing and trying to understand what is going on and the difference between what is happening at CBO and at Social Security, your office really supports the work of the Trustees, but ultimately, it is going to be their report that is reported out. So can you talk a little bit about your office's role in the process and how decisions and assumptions are made, and do you make recommendations to them?

Mr. GOSS. We definitely do. Thank you very much. For every Trustees report, the process within the Trustees working group starts out with our recommendations to them. We do not disclose them to you or to anybody else, but we do make recommendations to those within the working group and to the Trustees. There is much discussion and opining and then a decision as to what the Trustees want to go with.

I would suggest that there is usually pretty much similarity between what we recommend. And the one thing that I can assure you is that if ever the Trustees' process ends up resulting in as assumption that is really dramatically or unreasonably different from what we believe should be the case, we will report that to you in the actuarial opinion.

Now, in the process of determining these assumptions——

Mr. DOLD. Yeah.

Mr. GOSS [continuing]. We get incredible amounts of input. For example, labor force participation rates that were mentioned just a moment ago, labor force participation rates, we have talked over the past year or two to folks from the Federal Reserve Board who have sort of fostered the notion of looking at cohort analysis, and what is really happening in this recession is quite remarkable. People under 25, labor force participation rates, which are really just the extent to which the American people are trying to get a job to feed their families, So the labor force participation rates under age 25 have really dropped a lot in this recession. Cohort analysis, by some who have done this, suggested those cohorts are permanently affected, damaged, whatever, and they are going to work a lot less at all higher ages in the future.

We kind of don't believe that. We are not projecting that kind of notion into the future, and our last two technical panels, by the way, have suggested that our projections of labor force participation rates are too low. They have recommended that we go even higher. We, the Trustees, and we have recommended to the Trustees, we have collectively resisted the idea of getting more optimistic about labor force participation rates, but we really do not believe that labor force participation rates should be taken down to the levels of the early 1980s, before women were largely engaged in our workforce.

So we just think that that is kind of an interesting thing. We look forward to dealing with Keith and company more about how they come up with that assumption.

Mr. DOLD. Okay. But the labor force participation rate is one of the key ones that you are looking at.

Mr. GOSS. It is one of the major ones. At this point, probably one of the three biggest ones, other than methodological differences, as Dr. Hall mentioned, and that is something that is a very interesting area because our methodologies are really quite different.

Mr. DOLD. Sure. I look forward to diving into more of that, but I did want to talk, as we look at the administration, we are coming up to the close of this administration, and we still don't have public Trustees, right. So that is obviously an issue. There are six Trustees, two of them public Trustees.

The next Trustees report is going to be due in April, just when we are going to have a new administration coming in, about the same time they are getting settled. And these are big reports that can take almost a year to produce. So who is making the decisions on that now, and what happens if the new Trustees disagree with some of the assumptions that are made in the report?

Mr. GOSS. Well, for better or for worse, I have been around for a few transitions of administrations.

Mr. DOLD. We will say that is better.

Mr. GOSS. Thank you very much. Experience counts, hopefully, a little bit.

We have gone through a number of transitions, and as you would imagine, we are required, we really have an obligation with our current Trustees and with our staffs to be working toward the next Trustees report, and we will be working on developing assumptions, developing projections. However, when we have a new administration come in, whoever it is, and if they bring in different people, they get people confirmed, whoever they bring in, if they have different views, we will move in the direction of the different views because, as you mentioned, this is the Trustees report, and they do get to make the call on what assumptions we absolutely have.

So if new Trustees come in and they bring in new people and they want to do things differently and have different assumptions, clearly, the Trustees report will reflect that. If they make dramatic changes that we think are unreasonable, though, again, we will report that in the actuarial opinion at the end of the report, so we can give you that assurance.

Mr. DOLD. Can you shed a little bit of historical light? Have you seen that happen from administration to administration where there has been real changes from one trustee—set of Trustees to a second set?

Mr. GOSS. I think the wonderful thing is that when people put that hat on, the trustee's hat, regardless of their politics, we have been really impressed, I have been impressed for a few decades now, at how people take that so seriously because they know how important this program is. And we tend not to have a lot of sort of flip-flopping around in terms of the assumptions that people get. They really get it is a long-term projection; incrementalism really matters. And we really had tremendous consistency across the different people coming in. We sometimes have presentational issues that have changed from one administration to the next, but the basic assumptions that we used have really been quite consistent.

And I think having public Trustees really helps on that because we have really not just one party represented on the Board of Trustees.

Mr. DOLD. Mr. Goss, thank you.

My time has expired, Mr. Chairman.

Chairman JOHNSON. Thank you.

Mr. Blumenauer, you are recognized.

Mr. BLUMENAUER. Thank you very much, Mr. Chairman.

And I appreciate the thrust of the hearing to be able to get into some of the details, not only because how serious the deficit—or how immediate, I guess, the deficit we have to contend with really serves to, I think, constrict what Congress does. If it is more immediate and bigger, that might be a greater incentive for action, although given some of past congressional behavior, it might inspire more paralysis because it is really big and complex.

But piecing out the differences in terms of workforce participation, interest rates, what is going to happen with payroll, I think is a very important picture for us to be able to have the better understanding of the workings of the economy.

And, basically, I am of the opinion that the 4 or 5 years difference that you have in terms of the exhaustion of the trust fund balance, while not insignificant, really shouldn't color what we do because I think all of us appreciate that if we are getting down to the wire and it is 2 and 3 years and we are running a persistent 8 percent deficit, that makes the challenge more difficult, and it has ancillary effects that are going to be more difficult for the people who follow us. And no one is going to tolerate a reduction of a quarter in Social Security benefits. Ain't going to happen. But what we do to avoid that and when we do it matters a great deal.

I am hopeful that this inspires us to be able to think about ways to move a little faster. I have opined in sessions before that I would love for us to come together and declare a national Save Social Security Day sometime early in the next Congress where we invite people to come together and look at this information, where we invite people to come together to look at what the choices are.

And I have tried this experiment at home in high school civics classes, retirement homes, rotary clubs, and I find that most citizens, even without using some of the sophisticated calculators that are available to us, most citizens are willing to take action. They

are willing to make a little adjustment. They are willing to pay a little more or look at adjustments in the long term for some benefits that they think maybe some people don't need.

They don't want to undercut the integrity of this service that is becoming more critical for more people. Certainly, there are lots of people in Congress can continue serving indefinitely. I mean—but for a lot of people who have more demanding positions in the workplace, whose life expectancies are actually shortening, we need to be careful about how we maintain what they get.

I am hopeful that this is something that we might be able to come together to promote because I think the American public would like to roll up their sleeves and help us discuss it. I think they can help us develop alternatives that are not draconian and that could be phased in earlier in a way that would avoid the cliff, avoid disruption, and avoid making this one more political battlefield. We don't know—we don't need any more political battlefields, and we don't need any unease for the people who rely on this service.

I wondered if either of you could help me understand. You talk about assumptions about covered payroll. How does this change if we are looking at total Medicare payroll in terms of making a modest adjustment to what tax people pay if we get rid of the arbitrary limit and we are operating on Medicare wages?

Mr. GOSS. I would just offer if we were to go that direction, that hypothetical—and by the way, we have on our website estimates for several proposals to eliminate the taxable maximum or raise it to some higher level—that basically would eliminate, I think, to a large extent, if not completely, the difference that we have in our projections about the share of earnings that will be dropping down below this taxable maximum; that is, the share that we are concentrating much more so up above. The earnings concentration would not matter nearly as much if we did not have the taxable maximum as, you are exactly right, as Medicare does not at this point.

Mr. BLUMENAUER. But I should go to your website.

Mr. GOSS. Yeah.

Chairman JOHNSON. The time of the gentleman has expired.

Mr. BLUMENAUER. Thank you.

Thank you, Mr. Chairman.

Chairman JOHNSON. Can you all send him an answer in writing?

Mr. GOSS. Absolutely. We can even get you—right after the hearing, we will give you this stuff.

Mr. BLUMENAUER. Thank you, Mr. Chairman.

Chairman JOHNSON. Mr. Buchanan, you are recognized.

Mr. BUCHANAN. Thank you, Mr. Chairman.

I want to thank both of our witnesses today. They keep us focused and dialed in, and this is very good information.

I can tell you that the numbers I hear, a third—I am from Sarasota, Florida, and in Florida, 237,000 recipients count on Social Security just in my district. I think it is second highest in the country. But a third of the people that receive Social Security, that is all they have. There might be a different number; another third, it is something but not enough, I mean, or whatever. And then I read the other day, 62 percent of Americans don't have $1,000 in

the bank, so that is why—it was out of USA Today, I think, I read that, but I had to read it twice because it is hard to imagine.

But the bottom line is I agree with my colleagues totally. We have got to find a way to work together on a bipartisan basis to look at Social Security long term, the viability, whether it is 5 years short or not, and we have got to find also the other—even the bigger issue is Medicare in terms of dealing with that from a viability standpoint.

And then the other thing is just, you know, we all know the number, 10,000, 12,000 people a day turn 65 for the next 30 years. I can see—you know, come to Sarasota; you see a lot of people at 90. My mother-in-law just celebrated her birthday, 97. Her sister is 103. Another one is 101. You see a lot of that in Sarasota. I don't know about up north, but you see it down—you see it down in the Sunshine State, I can tell you that much.

Mr. LARSON. They are from the north.

Mr. BUCHANAN. I am just telling you. I did want to touch on two things. One is COLA. There is a projection—last year, they didn't get an increase. I do a lot of townhall meetings. It is a big issue. I can't believe how big it is, but it is a big issue. I think one of you is projecting .2; the other one is .6. What is the difference, if you could do that quickly because I have one other question, comment?

Mr. HALL. The big difference for us is that our economic projection was done well in advance of the long-term budget outlook, so we didn't have very much data for this year. That is the big reason why we were so low.

Mr. BUCHANAN. Okay.

Anything?

Mr. GOSS. Our projection was actually developed sort of very, very early in this calendar year—because, as Chairman Johnson mentioned before, it takes a while to get the reports together after we get all the assumptions together.

Mr. BUCHANAN. So what are you both projecting as the COLA rate next year?

Mr. GOSS. We, in the Trustees report, were projecting a .2 percent. And remember, we were in the hole on the CPI——

Mr. BUCHANAN. Okay.

Mr. GOSS [continuing]. For the last COLA, four-tenths negative change in the CPI, so we didn't have a COLA. So we have to make up that four-tenths and have even more increase in the CPI in order to have a COLA.

Mr. BUCHANAN. Okay.

Mr. GOSS. Our Trustees report at the time was suggesting we would have a net .2. At this point, our best guess is about .4, which wonderfully is right in between——

Mr. BUCHANAN. Right in the middle——

Mr. GOSS [continuing]. Where CBO and——

Mr. BUCHANAN [continuing]. Split——

Mr. GOSS [continuing]. Our best guess at this moment—by the way, it is through September of this year—the prices—so it is pretty much locked——

Mr. BUCHANAN. Let me say to you all this one other comment I want to make, and I am an optimist by nature, but I do have to

put this out here because I have seen too much as a guy that has been in business about being overleveraged. You know, I was born in Detroit, grew up in the Detroit area, great American city. It is on the comeback, but it was in bankruptcy. I looked at General Motors, iconic. A lot of our friends, you know, worked at General Motors. Both of these, the city and General Motors, a lot of their benefits got cut.

So, when I look at this whole thing, and I—you know, about the ability to pay, it concerns me when we got—we used to be at, when I got here, was $8 trillion and change, $9 trillion, now we are close to $19 trillion, $20 trillion in debt. Does that concern either of you, or are we just kind of kidding ourselves? I mean, Social Security has had a great history and great ability to pay, but it does concern me, because I have seen a lot of great iconic companies, and I have seen big cities, and just the ability to pay. And what happens to those Americans—a lot of them were family and friends of mine—a lot of their benefits they were counting on all their life, paid in for 30 years, earned it for 30 years, and then got shortchanged at the end.

And just in terms of looking forward—and I know in the trust fund, there is no money basically. You are counting on the ability of the government to be able to make its commitments. What is either of your thoughts quickly because I am sure my time is running out? Mr. Goss.

Mr. GOSS. I would just say that really you cannot compare Social Security and its solvency challenge to the Federal Government as a whole, because the Social Security trust funds really are so very different. The Social Security trust funds cannot go negative. There is no borrowing authority. So we do have $2.8 trillion. That is small relative to the long-term obligations it brings us. So it is a pay-as-you-go basically system, and really, I think the assurance that I would suggest that the American people should take about having the benefits come forward is your commitment.

We are absolutely confident that you, people on the Senate side, will maintain this program for the American people who elected you because it is so important to them, and that really is the ultimate——

Mr. BUCHANAN. Mr. Hall, quickly, do you have any comments? I just would like, both of you, to just get your thoughts on it.

Mr. HALL. Sure. Well, certainly, by assumption, in our forecast, and we assume that you are going to live up to your commitment on this. We have never done a scenario, but if we did a scenario where if you all did not and let the trust funds go down, we would have a pretty significant impact on not only the budget but probably economic growth and a lot of the economic numbers that would be shocking probably.

Mr. BUCHANAN. Well, I thank both of you.

And I yield back.

Chairman JOHNSON. Thank you.

Mr. Smith, you are recognized.

Mr. SMITH. Thank you, Mr. Chairman, and thank you to our witnesses here today. Obviously, despite the differences in various reports, both of you point to some realities that are out there.

Mr. Goss, your office routinely produces memos on Social Security reform plans introduced by Members of Congress and others. Along with information on Social Security solvency, these memos also show the effects of any benefit changes the plan makes. However, the memos do not include any information about additional taxes an individual pays due to the plan. Yet some plans, the tax changes are the big story, so why not show these effects? And certainly I would add that tax changes affect workers as well. Can you respond to that?

Mr. GOSS. Very, very good point, and we have been talking with members of your collective staff about changing this. Really, I think, essentially, the reason for this has been that, by and large, when there would be a change in revenue, most proposals through change in revenue would be to simply change our 12.4 percent tax rate, 6.2 percent paid by the employee, to raise it to something higher; or for people who have earnings above our $118,500 taxable maximum, to start applying the tax rate there as opposed to not. And that is relatively straightforward. That is a lot easier to comprehend what is going on there and just sort of understand that than it is to say, if we change the normal retirement age by a year, what does that really mean for benefits?

I think we really should have—point well taken. We are working towards developing sort of a comparative table that would show something about revenues as well, because some of the revenue proposals can get more complicated, as many people on this bench today know. So we are going to move toward that.

Mr. SMITH. I appreciate that.

And this discussion we are having today, I think, is especially productive. I would share the sentiments of my colleague from Connecticut that it is an insurance program, and I would add that we should probably keep it that way and be mindful of those dynamics of what an insurance, you know, structure is, and what it is not.

But back to the labor force participation. I mean, you are suggesting that the labor force participation goes back up. What assumptions would that be based on?

Mr. GOSS. Well, recessions have happened before. Our most recent recession was a special recession. Many have opined it is sort of the worst thing since the Great Depression, but this is a strong country. We have recovered from recessions before, and we assume absolutely we are going to recover from this recession.

Being as deep and strong a recession as it was, we are not surprised that it is taking longer than the recovery from those past recessions. We are pretty confident it is going to keep coming back. On the labor force participation rates, the place where they have been hit most are people who are younger. Some have opined that the people under 25, the share of them that are either in the workforce or in education hasn't really changed a lot.

So we are pretty confident that, as the economy gets stronger, as more jobs become available, that people will get back in the labor force and want to work, and most particularly, people under 25 who have been out of the labor force in this bad recession, we do not believe that as they get to be 35, 45, and 55, they are going to be permanently not in the labor force. We don't see how they can

possibly have lower participation rates in the future really than cohorts in the past.

And the only reason that we have our overall age-adjusted rate going up is because that includes people over 65. People over 65 in the future, I will attest to this, I hope, we believe are going to be living longer. At any given age, they are going to be living healthier, and they are going to be more capable than people at those ages in the past.

That being the case and knowing they are living longer, they know they are going to have to live—they are going to have to work longer to build up their nest egg, and they will have a greater ability to do so. So we believe that all these things suggest we will not only recover, because people want to eat, they need to have a job, and that people at older and older ages will be wanting to work somewhat longer in the future and have a greater ability to do so.

Mr. SMITH. So what growth rate would you suggest would—I didn't see it here, would trigger a return to a labor force participation rate that you find to be optimal?

Mr. GOSS. Well, if we look at labor force——

Mr. SMITH. And probable——

Mr. GOSS [continuing]. Participation rates sort of age by age, which I would suggest is the way to look at it, if you say our population is changing its age distribution and you allow that to affect what you are saying is the labor force participation rate, then that will be very difficult to understand what is going on, could be misleading. So we will look age by age, look age-adjusted, and we basically are returning to essentially the labor force participation rates we had at younger ages, below 65, as in the past. But for higher ages, over maybe 55, because of the longevity factor, because we all agree that people are going to be living longer and living healthier, we believe that people will have the ability and even the need to be working longer in the future.

I mean, there has been considerable mention here of defined benefit plans by large corporations have been on the wane for quite some time now, so people, we believe, are understanding and will be understanding a greater need to work longer in the future.

Mr. SMITH. Thank you.

Thank you, Mr. Chairman.

Chairman JOHNSON. Mr. Kelly, you are recognized.

Mr. KELLY. Thank you, Mr. Chairman. It is great to see you back.

Mr. Larson, Mr. Blumenauer, it is good to be with you all.

Because what you are touching on, now, the two of you, the one thing you do agree on is that this thing hits a wall, one 5 years later than the other. But you both agree on that, and you both come down to it is just because of—and just maybe explain it, very short, where does the revenue for Social Security come from? How are the benefits paid? Where does the money come from?

Mr. HALL. Well, obviously, it is from the labor force, the number of people working.

Mr. KELLY. Right.

Mr. HALL. We have pretty different forecasts of GDP growth, I think, nominal GDP growth. That is one of the big differences and, of course, the labor force participation. We talked about that a little

bit, but I didn't mean to be misleading when I pointed out that one of our differences is that the historically low levels of labor force participation by almost all ages below baby boomers, but the biggest difference is we see a bigger impact of the retirement of baby boomers.

We see a bigger age impact. So, for example, right now, we look at labor force participation about 67.1 percent. We think it is going to go down to 62.5 percent and then down to 60 percent in 10 years. That is a pretty big drop, and those are baby boomers retiring. And to give you some idea, right now, those 65 and older are about 25 percent. They are about—of all the people who are working age 20 to 64, the people above—65 and above is about 25 percent of those folks.

In 75 years, it is going to be about 50 percent of those folks. So it is this demographic, this aging, that is having the biggest impact on revenues going forward, and then, of course GDP growth. We have really lowered our GDP growth for——

Mr. KELLY. Yeah, I think there is confusion sometimes when I am back home—and it is almost 40 percent of the people in the district that I live receive Social Security benefits.

Mr. KELLY. Now, not all those who receive benefits are actually donors to the fund, but we have changed that dramatically from what Social Security started at to what it is today. In other words, who puts money in and who gets to take money out, that also distorts the model.

But I think the confusion does come down to when you talk about the participation rate, the money does not come from the government. The money comes from working people. That is where the money comes from. Also, this is so basic, and I think when we talk about these things, we make it something that is really complicated that is not that complicated. You either have more money going in and less money going out, or if there is too much money going out, you have got to get more money going in. It is just that simple. And, unfortunately, when they first devised this plan, people weren't living as long. For somebody my age, I am glad that they were wrong, but we still have a problem with revenue. It doesn't change.

A dynamic and robust economy is the only thing that fixes this, right? Is there something I am missing here? Because, unless we get more people working, we are not going to have the revenue that we need. And so when we talk about all these marvelous plans and what we could do to save Social Security, the one thing we better do is find people jobs. It is just that simple. My whole life—listen, I own a business; 12.4 percent of every paycheck went into Social Security, right? That is just by law: 6.2 from the owner of the business, 6.2 from the person out there working. So we play this ring–around–a–rosy about who is going to do what. I tell you what to do: Get people back to work. Give them a chance to get up in the morning and go to work. They will put money in. They don't have any problem with helping to fix it, but they have to have a job to do it.

So a dynamic and robust economy is the whole answer to this. And while we talk about how we could adjust the plan, I would rather fix it at the source. And that is the people who put it in.

I know you guys do marvelous work. And, believe me, the Chairman said we need to get ready. Here is what we need to get ready for: We are all partners in this. We are joined at the hip, not as Congressional people and you as working. As Americans, we are joined at the hip. Why we can't see that—and I don't want people to think that somehow there is somebody in a beautiful knight's outfit on a white charger is going to come running and save the day. It is going to happen with working people and Congressional leaders and government people who work together to fix it. So I know you are 5 years apart, but there is one thing you agree on.

Mr. GOSS. Could I just add on the labor force participation rates——

Mr. KELLY. Yeah, sure.

Mr. GOSS. Dr. Hall was mentioning what we would call sort of like an overall or a gross participation rate. It is really, really important, because we do have demographic assumptions, and we have economic assumptions, and separating them is really important.

No question our population is aging in the future. We are going to have a greater share of our adult population over 65. That is absolutely true. But when we talk about labor force participation, if you just want to look at it sort of all the 16 and over, a smaller share will be working, yes, because a lot of people will be over 65, more than in the past. If we really want to talk about the tendency for people to be in the labor force, though, we have to look age by age or taking out the age distribution effect. And that is what we have really done in these projections, and that is where we are showing that we are going to be basically stable with a little bit of rise in the future because people living beyond 65, we believe, will be healthier and living longer and have a greater ability and that we will return after the recession, for people under 65, back to levels similar to what we had before the recession. If we don't, then we——

Mr. KELLY. I get it. I get it. The number one problem that people have who are trying to hire people is finding people who are qualified to do the jobs that are available today. It starts at a level of educating people. I sat on a school board, and I would go in and talk to guidance counselors. You know what they talked about? They talked about the kids who were going to Harvard, the guys who were going to Yale, the guys who were going to Princeton. I said: Don't tell me about that. Tell me about the kids who aren't going anywhere. Tell me about the kids who, when they graduate, have no place to go. Are we getting them ready for any jobs that are out there?

I come from a steel town in a railroad-car-making town. And if there is anything that has been hit worse than that, I would like to see where it is. But it is getting people ready for the world we live in today so that they can walk out of that schoolroom and onto the field and play and participate. It is the low participation rate that is killing us.

Now, we changed the metrics of how we were going to pay out Social Security. I get that. Beneficiaries, not every single beneficiary ever put any money in the account. As a guy that handles a pension account for my own people, I could not do what the gov-

ernment has done to the account. If I did it with my pension plan, I would be in jail. So we have played with this thing for far too long. I agree with my colleagues on the other side, and we talk about this when we are off the floor and sometimes on the floor. We have got to fix this thing.

The other thing, we have got to get the American people aware that you have got to get to work. It is about jobs, jobs, jobs, and more jobs. We have got to get this labor force participation rate up. That is where the answer is. We have got to create a dynamic and robust economy where every single American can get up every day and not just walk to their job but run to their job, because they can take care of themselves, their families, and the future.

Mr. Chairman, thank you so much for calling this. Listen, John and I and Earl, we get along so well in this, I just think people at home would be shocked at how well we get along because they seem to listen to people on the Internet rather than people who actually are here. So God bless you for what you are doing. We want to work with you.

Chairman JOHNSON. Thank you.

Mr. Rice, you are recognized.

Mr. RICE. Thank you, Mr. Chairman. Thank you for holding this hearing today, and I am glad to see you back.

You know, this is a difficult problem. It is not terribly complex. As Mr. Kelly says, we make it more complex than it is, but it is just math. We have got less money coming in than going out in the long run, and that money will run out eventually, and so people's benefits will have to be reduced unless we do something. Everybody in the room knows that, eventually, we will do something. The President says the Social Security trust fund will expire sometime in this timeframe, 2030 to 2033. Every Republican, every Democrat in the House and the Senate, they all say the same thing. They all go home, tell all their people back home: this is happening and needs to be dealt with.

And yet there is a dearth of solutions, specific solutions offered. Why? Because it is difficult. Why? Because if you talk about reducing the outgo, cutting people's benefits, you make that population angry. If you talk about raising the revenue, you make another population angry. And politicians are loath to make people angry. But we have to offer solutions. I believe it is one of the factors that is holding our economy back. I believe it is one of the five major issues that are holding our economy back, that are holding our job creation back, that are holding our American optimism back, and that it is something that is solvable. We just have to—as AARP used to run commercials just recently—take a stand. Of course, if you ask them what their plan is, they won't tell you. They won't take a stand.

So what we have to do is we have to show political courage here, and I am very, very hopeful that this committee through these hearings is preparing to do exactly that, to offer a plan to solve this problem, to take this problem off the table, once and for all, and to resolve it so that we can move forward. But if we have CBO and we have the Social Security Trustees differing on the numbers so that we don't know exactly what target we need to hit, that obviously makes the problem a little more difficult—a lot more difficult.

When we deal with this problem, we want to get to 75-year solvency. That is how both of you-all defined solvency, right, 75 years, right, both of you? So I really hope that you can sit down together and pull a little closer on exactly what that will take, because if we have to, when we come up with our solutions and put those on the table and go through the wrangling that we need, we sure don't want to have to revisit this in just a few years. Once we resolve it, let's get it resolved and put it to bed.

So I am hopeful that you all can come together and compromise on your assumptions like we are going to have to compromise on our solutions and put this thing to bed for the American people so that they don't have to be threatened by the fact, by Republicans and Democrats, by the President and the House and Senate, every time we speak about Social Security and this potential for the trust fund to go bankrupt. Thank you.

Chairman JOHNSON. Thank you.

Mrs. Black, you are recognized.

Mrs. BLACK. Thank you, Mr. Chairman.

And it really is good to see you back looking so good and out kicking butt with a new knee. We are really happy to have you back and being the Chairman of this Subcommittee.

Such an important issue for us to discuss, and as my colleague to my left has indicated, you have got to have good information in order to make good decisions on how you fix the problem.

So, Mr. Hall, I want to go to you. In the past, the CBO used some of the Trustees' demographic assumptions in their forecast of Social Security solvency, but recently that has changed. How does CBO decide which numbers to use from those external sources, including the actuary, and which numbers to produce internally?

Mr. HALL. Sure. First of all, to put this in perspective, up through 2012, we simply used the demographic assumptions as the Social Security Trustees. In 2013, we changed that, and that actually was the biggest change I think, in our actuarial balance. And the biggest change we made there was we looked at the rate of increase in mortality, mortality improvements over time, which would, which looked to be going—the improvements were much quicker, I think, than our previous assumption. So we followed the recommendations of demographers. We followed the recommendations of the Social Security technical panel, and we did our own analysis when we made the decision to increase the improvements in mortality, and it raised the longevity of the population 75 years from now, and that had a pretty big impact on our actuarial balance.

So the way we are operating is we are there to be independent and objective and make decisions that we think are the best. So we continually talk with our panel. Most of our changes, we talk to our panel of economic advisers. They are very prominent people. We look at research. We do our own research, and I say we look at what Social Security folks are doing and what the technical panel is recommending, and we make decisions that we think give us the best forecast at any point in time for the next 75 years.

Mrs. BLACK. Mr. Goss, do you want to respond to that?

Mr. GOSS. Yeah—actually, I am going to—perhaps the detail, but actually CBO was using our population projections lock, stock,

and barrel through 2010. Then, in 2011 and 2012, CBO made some changes to use somewhat different immigration assumptions. Dr. Hall is exactly right. It was in 2013 that truly dramatic changes were made at CBO on the mortality projections. They stopped using ours. Also disability incidence rate assumptions were changed at CBO. Lots of different things were changed, but the mortality in particular was really, really critical.

Longevity is really, really important. One thing that we have recognized over the years is that there is an age gradient, that mortality rates tend to drop, have dropped historically, a lot faster at younger ages than at older ages. And in 2012, based on the recommendation of one of our technical panels—and by the way, we get recommendations from people all over the place. Every 4 years, another technical panel, we get lots of recommendations. We and the Trustees look at them all and take them all under advisement. But that panel—and CBO went with it—said let's go to roughly 1.2 percent per year reduction, all ages the same. And we are assuming about .8 percent overall with a slower rate of decline at high ages and a faster rate of decline at younger ages.

Now, I am happy to say that Keith and CBO have now gone away from that assumption that they went to in 2013, and as of 2016, they have modified their mortality assumptions in a way now that come back very, very much closer to ours. I think the net effect on mortality should be very similar to ours, from the best we understand it, because we actually put out an actuarial note, No. 158, right around the time of our last Trustees report that analyzed some work by Ron Lee, a really good demographer out, formerly of Berkeley. I think our impression is that what CBO is doing now is very similar to what Ron Lee did. Ron Lee has a little bit faster rate of overall decline in death rates, but a much bigger differentiation between high and low ages. And the impression we have at least is that's where CBO is at this point. The bottom line, though, is the net on mortality is now very similar. So CBO, as of 2016, is not having as big an extra shortfall from mortality as it did in 2013, 2014, and 2015. But at the same time that change was made, also the birth rate was altered at CBO that literally went in the direction of assuming a substantially lower birth rate going on indefinitely into the future, which would result in a big change in our age distribution and, therefore, in the cost as a percent of payroll for this program.

Mrs. BLACK. Would you like to respond?

Mr. HALL. Sure. Let me just jump to, I was sort of giving you an idea of why we started changing things, because we really started changing things in 2013. Where we are right now, the biggest difference comes from the share of earnings subject to Social Security tax. That accounts for the biggest difference. Second is our nominal GDP, our economic forecast, is pretty significant. That makes a big impact. And then the third thing is the demographics. So, at the moment now, most of the differences are more basic than that. They are sort of economic differences rather than demographic differences.

Mrs. BLACK. Thank you for that clarification.

I yield back.

Chairman JOHNSON. Thank you.

Mr. Becerra, do you care to question?

Mr. BECERRA. Yes, Mr. Chairman. Thank you very much.

First, gentlemen, thank you for your testimony and your work over the years. I know you have covered a number of things, so let me just zero in on a few.

Mr. Hall, you just talked about the earnings subject to Social Security tax. I suspect the two of you will agree that the earnings subject to Social Security tax has remained consistent for—how long has it been since we have had the 12 and a quarter, 6 and an eighth, 6 and an eighth? So——

Mr. GOSS [continuing]. 6.2 for——

Mr. BECERRA. Mr. Goss, clarify. How much is paid in by a worker, and how much is paid in by the employer of the worker?

Mr. GOSS. For wage and salary workers, they paid in 6.2 percent of the employee's wage and salaries each. So they split it even. Self-employed workers are responsible for paying the whole thing.

Mr. BECERRA. 12.4.

Mr. GOSS. 12.4.

Mr. BECERRA. Okay. So 12.4 percent, Mr. Hall, you'd agree with that?

Mr. HALL. That is right, although let me just clarify, when I say the share of earnings subject to tax, I am really talking about the effects of the maximum, the tax max, on a payroll.

Mr. BECERRA. Let's go there. Let's go there, because there is a maximum amount that you can have withdrawn from your paycheck to cover the 6.2 plus 6.2 percent of the payroll tax. And, Mr. Hall, what is that maximum now?

Mr. HALL. Oh, the tax max?

Mr. BECERRA. Yeah, the tax maximum.

Mr. HALL. I don't remember now. $116,000?

Mr. GOSS. $118,500.

Mr. HALL. So the real difference for us is we forecast growing income inequality. We think that income inequality is going to continue to grow——

Mr. BECERRA. I want to go in a different direction. What I am trying to just do is establish what we do know as fact and the hard things that we can work with because from there, we make our projections. And as it has become clear, you have differences in your projections. And which one comes true, probably none of us will be alive to see. But they are projections, and they are very important because that is how we are going to base our policy and how we act.

But we know that Americans are contributing 6.2 percent of their paycheck and their employers are contributing another 6.2 percent for a total of 12.4 percent. I showed a chart that indicated that, over the course of the 80 or more years that Social Security has been around, we have contributed a total of about $19 trillion—well, it is $19 trillion that the trust fund has collected and the Social Security system has collected, but that would include also the money that has earned interest on those tax contributions that have been paid in.

Mr. Goss, how much of that money that Social Security has brought in under the program, Social Security program, has come

from the interest earned on the tax contributions of American workers?

Mr. GOSS. We do have that in our Trustees report. I could look it up. I don't know if we have the time to do that now.

Mr. BECERRA. I know it is roughly $2 trillion. I just don't know how close to the $2 trillion——

Mr. GOSS. It is a relatively small portion because really the aim historically of Social Security is not to be a fully advanced—a little actuarial term here—a fully advanced funded system like a private pension.

Mr. BECERRA. Spoken like a true actuary, that $2 trillion is a small portion.

Mr. GOSS. Sorry. The $2.8 trillion, in the context of this program, it is only 3 years' worth of our benefits, and the kind of pensions that we might be familiar with out in private industry typically to be fully advanced funded have to have about 25 times annual outgo.

Mr. BECERRA. So here is what I think is important that gives us a chance to come up with some policy solutions to track that challenge that is coming up, and that is that, along with those $2 trillion that have been earned in interest from Americans' tax contributions into Social Security over 80 years, that complements—the number I have here is $17 trillion that Americans have paid into Social Security since its inception in 1935. To me, what is remarkable about that number, $17 trillion plus $2 trillion, $19 trillion, is that we continue to pay it. A lot of Americans could have been skeptical about the program and said: You are taking money out of my paycheck. That is money out of my pocket that I could be using right now to buy that house or maybe save for my retirement myself.

But we continue to do it to the point now where tens of millions of Americans are now benefitting from having believed that the system was going to work. And so far, every American who paid in, as I said, has been able to know that he or she is going to get his or her money in full on time until they die. And that is the beauty of Social Security, where the reason why I think we are going to find Americans saying: You better make sure you fix Social Security the right way because it is about the only thing that we have found reliable over the years, public or private.

And if you think about what has gone on with the financial services institutions, with Wells Fargo and how it defrauded a number of Americans, you need to have confidence in your programs. And that is where I think your testimony, both of you, has been valuable.

Mr. Chairman, I am glad we are doing these hearings because this is going to take us a little closer to having those conversations we need to actually come up with some policy. So, Mr. Chairman, I thank you for holding this hearing.

I thank our two witnesses for their expert testimony.

Chairman JOHNSON. I do too.

And we all know Social Security is in trouble, and just how much depends on who you talk to. While 75-year estimates aren't ever going to be perfect, having CBO and the Trustees so far apart does raise questions, and rightfully so. Congress relies on these well-re-

spected experts to give us the best information so we can make decisions on the best ways to strengthen Social Security for our children and grandchildren so they can count on it, just like seniors and individuals with disabilities do today.

And I appreciate you two being so straightforward with us. Thank you for being here. Thank you for your testimony.

And thank you to all the Members who are still here. I appreciate that too.

And that concludes our testimony today. And, with that, the Subcommittee stands adjourned.

[Whereupon, at 11:24 a.m., the subcommittee was adjourned.]

Member Questions for the Record

SOCIAL SECURITY
Office of the Chief Actuary

December 6, 2016

The Honorable Xavier Becerra
Ranking Member, Subcommittee on Social Security
Committee on Ways and Means
House of Representatives
Washington, DC 20515

Dear Mr. Becerra:

Thank you again for the opportunity to testify before the Committee on Ways and Means, Subcommittee on Social Security, at the September 21, 2016, hearing on "Understanding Social Security's Solvency Challenge." It is always a pleasure working with you, Kathryn Olson, and everyone associated with the Subcommittee. I hope the information that I provided at the hearing will be helpful. Below I have restated the seven questions you sent to me on November 4, 2016, and have provided answers.

1. **Please describe the model or approach the Office of the Chief Actuary (OCACT) uses for making long-range projections, and what you know of the model and approach used by the Congressional Budget Office (CBO), comparing and contrasting the relative strengths and weaknesses of each approach.**

   The model our office employs for making long-range projections is motivated by the requirement in the law for annual reporting on the "actuarial status" of the OASI and DI Trust Funds. Our model has been under constant development and refinement for over 80 years, since before the original Social Security Act was signed in 1935.

   Because the Social Security and Medicare programs provide coverage for virtually the entire United States population, plus several outlying areas, we start with a comprehensive projection of the entire "Social Security area" population, reflecting detailed assumptions about birth, death, immigration, marriage, and divorce assumptions by age and sex. Great detail is necessary due to the differences in employment experience and benefit options for these groups.

   These population projections are then passed to separate models for projecting the percentages of the population by age, sex, and marital status that are employed, become insured for potential receipt of benefits, and ultimately receive benefits. Additional models then build on the projected beneficiary population, developing detailed

distributions of benefit levels and total amounts of benefits as scheduled in the law. A final model combines the projected benefit costs with projected payroll tax revenue, projected income tax on the benefits, and interest on trust reserves to project the annual levels of reserves on hand. This determines the solvency of the trust funds and the degree to which Congress will need to make adjustments in program specifications so that future scheduled benefits can be paid in full on a timely basis.

The main actuarial model described above incorporates both a short-term 10-year actuarial model and a long-term 75-year actuarial model that are developed separately but are closely coordinated to assure both perspectives are reflected in the results. The model uses various types of analyses, including, for example, regression models for labor force projections and microsimulation models for projecting benefit levels for those who begin receiving monthly benefits. Extensive documentation of the model, assumptions, and results are publicly available and reviewed on a regular basis by a range of oversight entities, both formal and informal. We strive for transparency in all aspects of our model, except for disclosing data that could compromise personally identifiable information.

In addition, our office develops and regularly runs separate comprehensive stochastic and microsimulation models to assure that the main actuarial model can be informed by all that these separate models offer. In this way, we are able to take advantage of the strengths of all of these models in developing not only the projected actuarial status under current law, but also the implications of potential modifications of the Social Security Act considered by Congress and other policymakers.

Our understanding of the models employed by CBO is less detailed. We understand that projections for the first 10 years are provided by various divisions outside of the division responsible for long-term projections. CBO's long-term projections use a microsimulation model (CBOLT) that was developed around 2000. Comprehensive microsimulation models, like CBOLT and our Polisim model, are very useful in developing distributional analysis of the individuals simulated in the model. However, because "transitional probabilities" must be developed and applied on an individual person basis, such comprehensive microsimulation models can be complex and cumbersome, while at the same time potentially limited in the numbers of individuals that can be included in the simulation. As a result, microsimulation models can produce somewhat uneven results over time and across age groups. Given the complexity of making many transition determinations for each simulated individual for each year, it can be difficult to manage overall aggregate results from such models. It is for this reason that we utilize microsimulation in our main actuarial model only for limited areas where detailed distributional results are essential. Beyond these general considerations based on our extensive experience with all types of models, we are unable to provide specific analysis of the CBO model, much of which is closely held by CBO.

2. **Please elaborate further on your projections regarding changes in the rate of labor force participation, and the reasoning behind the assumptions you make about the future, compared to past experience. Also, why are these rates shown in**

presentation after adjustment for age and sex, and what is the impact of this on your modeling and projections?

Our labor-force participation rate model reflects historical experiences and future expectations for disability prevalence, marital status and child presence, the state of the economy, trends in educational attainment, and trends in longevity. We also incorporate cohort effects where appropriate. We find these factors are related to changes in labor force participation rates (LFPR) by age and sex, particularly the declines in male rates at ages 25-54. Over the past several decades, increases in disability prevalence and the percent never married appear to explain most of the decline.

In order to understand the effects of changes in LFPR over the past and the future, we look at age and sex specific rates, summarizing these rates into an age-sex-adjusted rate by applying all age-sex-specific rates across years to a single standard population. This approach allows us to see the specific rate of engagement in the labor force, free of the effects of a changing age distribution of the population over time. Effects from the changing age distribution of the population are best considered separately from the basic propensity to engage in the labor force by age and sex. If LFPR is presented for the adult population as a whole on a "gross" basis (total number of individuals in the labor force divided by the total population age 16 or over), the time trend provides an inconsistent comparison of tendency to engage in the labor force. In addition, if underlying population projections produce different age distributions for the adult population (as for our projections and CBO projections), then gross LFPR is not even comparable for the same year. Age-sex-specific, or age-sex-adjusted LFPRs are necessary to make a valid comparison over time or across two or more projection models.

Our LFPR model projects that once the economy returns to full employment, the age-adjusted LFPR for males will rebound to nearly the same historical levels as seen in the 1990's and early 2000's, and the age-adjusted LFPR for females will rebound to levels higher than seen in this historical period. Thereafter, our model projects some modest further increase in age-adjusted LFPRs based on the assumption that increasing longevity will reflect in part better health and ability to work to higher ages. In fact, our 2011 and 2015 Technical Panels both recommended that we project LFPRs even higher than we have for recent Trustees Reports.

One area of difference among some forecasters is the extent to which recent declines in LFPRs, particularly at ages under 25, will persist as the cohort ages. Some believe that the reduction for those under age 25 will be permanent for the rest of their lives, and will result in lower LFPRs for all future generations at all ages. We have not seen a convincing rationale for this dramatic permanent level shift in LFPR at all ages. In addition, we do not believe that the slow recovery from a very deep recession should be interpreted as evidence of a permanent shift. The degree to which LFPRs by age and sex may have been permanently affected by the recent recession is yet to be determined.

3. **Please elaborate further on your projections regarding the rate of increase in income inequality, and the rationale for the assumptions you make about the future, compared to past experience.**

We focus carefully on several aspects of income distribution and changes in the distribution. The share of national income from the sale of all products and services that is paid in the form of employee compensation and self-employment earnings is important, and has been relatively constant in the past. The share of employee compensation that is paid in the form of wages and salaries is particularly important, because most "fringe benefits" are not subject to the Social Security payroll tax. We project a small rate of decline in the share of employee compensation that will be paid in wages and salaries, largely based on expected increases in the cost of health insurance provided to employees by their employees.

Most important for the past several decades has been the increasing concentration of earnings (wages, salaries, and self-employment income) among the top 6 percent of our workforce. In the early 1980's, Congress set the Social Security taxable maximum level with the intent that about 90 percent of all covered earnings would be below that taxable maximum and thus subject to the payroll tax. For 1983, the share of earnings below the taxable maximum was about 89 percent. In order to maintain this share, Congress specified that the taxable maximum would be indexed to the annual rate of increase in the economy-wide average wage level. Had the relative distribution of the workforce by earnings level remained as it was in 1983, the share of earnings that is taxable would have remained at 89 percent. Instead, this "taxable share" has declined to about 83 percent.

As we have detailed in testimony, the increasing concentration of earnings among the top 6 percent of earners has reduced the share that is below the taxable maximum at a rapid rate of 0.34 percent per year between 1983 and 2001. However, this rate of reduction in the taxable share slowed considerably between 2001 and 2014, to only 0.12 percent per year. Our current projections continue this slowing to 0.04 percent per year between 2014 and 2027. We believe that there is a limit to such earnings concentration, and that the deceleration we have seen recently signals that we are approaching that limit.

We understand that CBO projects a strong reacceleration in earnings concentration and reduction in the taxable share of covered earnings between 2014 and 2027. A further drop in the taxable share from the current 83 percent to just 77.4 percent by 2027, as projected by CBO, suggests substantial structural changes in the economy and employment in the near future.

As a further note, we believe that the actuarial status of the Social Security program should be assessed relative to taxable payroll, which is the tax base available to support the program. Considering Social Security cost as a percent of Gross Domestic Product (GDP) is interesting, but is not directly relevant to the actuarial status of the trust funds. Moreover, comparing program costs, income, or shortfalls as a percent of GDP across two or more projection models can be misleading. For example, in a model where payroll

is declining as a share of GDP (as it does if the model assumes increasing earnings inequality), considering cost as a percent of GDP makes the cost of the program appear to be small and rising slowly. At the same time, the cost of the program will be rising faster as a percent of taxable payroll, the actual revenue base for the program.

4. **Are there special considerations that should be taken into account when making long-term (75 year) projections as compared to making near-term projections, such as the 1, 5 or 10 years that have long been a focus for CBO?**

   Projections of 5 years or less for the economy, the population, and operations of the trust funds are generally done by extrapolating very recent trends. It is difficult in this short time frame to accurately project turning points in trends and changes in underlying conditions. For a long-term projection of 50 or 75 years, it is essential to make judgments about the ultimate average levels or rates of change for parameters, reflecting expected changes in underlying conditions and movements within economic and other cycles. A 10-year projection is generally too long to use a simple extrapolation of recent trends and requires consideration of how and when recent trends will transition into long-term ultimate levels or rates.

   For long-term assumptions, we generally consider longer-term historical average levels or trend rates of change as a starting point. However, analysis of the underlying conditions that contributed to the historical experience, and an assessment of the degree to which these underlying conditions are likely to change in the future, is critical. Every long-term assumption should be analyzed for reasonableness.

5. **Please discuss the notion of making incremental changes in assumptions from year to year, and how you approach whether and to what extent your assumptions should reflect recently-observed changes in economic and demographic behavior.**

   In selecting longer-term assumptions, it is important to be clear on why the future value or trend for each parameter is expected to be the same or different from the past. Recently observed changes in any parameter can be simple aberrations due to unexpected one-time events, or stages of a cycle. Such recent changes should be given little weight in selecting long-term ultimate assumptions. However, some recently observed changes are the result of well-understood fundamental modifications in conditions that are highly likely to persist, such as the drop in the birth rate after 1965, increased labor force participation by women over the last three decades, and of course changes in law. Changes of this sort should be reflected in long-term assumptions quickly, potentially even before substantial new experience is recorded to reflect the changing condition.

   When recently observed changes persist for several years without evidence that they represent a cyclic movement, then some incremental change in the expected ultimate level or trend rate is reasonable. If the change persists longer, then further modification in the long-term assumption may be warranted to the degree that a fundamental or structural change in underlying conditions can be identified. The credibility of long-term

assumptions and projections depends on the reasonableness of the rationale for maintaining or deviating from long-term past levels or trends.

Adherence to the principle of incremental change has served us well in producing consistent and stable projections of the actuarial status of the Social Security Trust Funds in the annual Trustees Reports starting in 1941.

6. **What is the oversight structure regarding your projections – what other entities review or have input into the development of the assumptions, the methods, and the results produced by the staff working on the projections?**

The assumptions and methods used for the projections in the Trustees Reports are subject to a very substantial level of oversight and demand for transparency. The methods and assumptions are reviewed and approved by the members of the Boards of Trustees each year, and are certified to be reasonable by the Social Security and Medicare Chief Actuaries, as required by the law.

In addition, Technical Panels composed of actuaries, demographers, and economists from outside of the Trustees' process have been appointed by the independent Social Security Advisory Board (and earlier by Advisory Councils) every 4 years for several decades. These Panels openly and publicly review our assumptions and methods and make recommendations for any changes they feel appropriate. Their conclusions are made public, along with their rationale for suggested changes. In addition, the Trustees Report projections are subject to an annual full-scope audit by the SSA's inspector general (IG), including participation by both a major auditing firm selected by the IG and the Government Accountability Office. Their findings are published in the agency's Annual Financial Reports.

OCACT publishes extensive documentation, so our methods, assumptions, and the projections themselves are scrutinized by a wide range of academics, interest groups, and members of Congress. Questions and criticisms that arise from this transparency push us to continually develop and refine our projections. In addition, we continually engage with outside experts in relevant areas, through conferences and informal contacts, in order to solicit other views and discuss the widest possible range of considerations for future assumptions. For these reasons, we believe that our projections and methods are the best possible at this time and will continue to be in the future.

7. **Why is the discipline of actuarial science relied upon for making long-term valuations of insurance systems?**

Actuarial science has existed and has been evolving for centuries. It combines knowledge and understanding of demographics, economics, insurance risks, and actuarial valuation. These multidisciplinary aspects are necessary to assess the "actuarial status" as required by law for our major national social insurance programs.

Making a valuation of any insurance system requires a precise understanding of the nature of the coverage and the basis for its financing. The solvency of the insurer is the first priority, to assure that insured status that has been earned by paying premiums will be met with benefits as prescribed. Actuaries are uniquely educated, trained, and equipped to make these valuations.

Unlike most other professions, actuaries focus on long-term analysis, which is fundamental for many types of insurance. Individuals who have attained insured status for Social Security benefits may be decades away from the time when they may claim and begin receiving benefits. Thus, experience and training in long-term modeling and risk considerations are essential in developing credible valuations of the actuarial status of the Social Security program.

In addition to training, actuaries are subject to a stringent credentialing process, involving exams assessing competency in the multidisciplinary aspects of the profession. Once credentialed, actuaries are subject to strict continuing education requirements, standards of practice, and counseling and discipline imposed by the profession. For these reasons, actuaries are essential for performing the valuations required by the Social Security Act. Finally, due to the special nature of social insurance at the national level, our office employs not only actuaries, but also specialists in demography, and economists experienced in all aspects of employment and earnings analysis and modeling. This integrated team of professionals carries on the legacy of Bob Myers, who started the actuarial work on the Social Security program, even before enactment in 1935.

I hope this further information will be helpful. If you have any additional questions or need assistance in any way, please let me know.

Sincerely,

Stephen C. Goss, ASA, MAAA
Chief Actuary

Enclosures

cc: Kathryn Olson

COMMITTEE ON WAYS AND MEANS

U.S. HOUSE OF REPRESENTATIVES
WASHINGTON, DC 20515

November 4, 2016

Stephen C. Goss
Chief Actuary
Office of the Chief Actuary
Social Security Administration
6401 Security Boulevard
Baltimore, MD 21235

Dear Mr. Goss:

Thank you for your testimony before the Subcommittee on September 21 at its hearing on "Understanding Social Security's Solvency Challenges." In order to complete the record for the hearing, please respond to the following questions:

1. Please describe the model or approach the Office of the Chief Actuary (OCACT) uses for making long-range projections, and what you know of the model and approach used by the Congressional Budget Office (CBO), comparing and contrasting the relative strengths and weaknesses of each approach.

2. Please elaborate further on your projections regarding changes in the rate of labor force participation, and the reasoning behind the assumptions you make about the future, compared to past experience. Also, why are these rates shown in presentation after adjustment for age and sex, and what is the impact of this on your modeling and projections?

3. Please elaborate further on your projections regarding the rate of increase in income inequality, and the rationale for the assumptions you make about the future, compared to past experience.

4. Are there special considerations that should be taken into account when making long-term (75 year) projections as compared to making near-term projections, such as the 1, 5 or 10 years that have long been a focus for CBO?

5. Please discuss the notion of making incremental changes in assumptions from year to year, and how you approach whether and to what extent your assumptions should reflect recently-observed changes in economic and demographic behavior.

6. What is the oversight structure regarding your projections – what other entities review or have input into the development of the assumptions, the methods, and the results produced by the staff working on the projections?

7. Why is the discipline of actuarial science relied upon for making long-term valuations of insurance systems?

I would appreciate receiving your response to these questions by November 28, 2016. Please send your response to the attention of Kathryn Olson, Democratic Staff Director, Subcommittee on Social Security, Committee on Ways and Means, 2017 Rayburn House Office Building, Washington, DC 20515. In addition to a hard copy, please submit an electronic copy of your response to Kathryn.Olson@mail.house.gov and to the Subcommittee clerk at MM.Russell@mail.house.gov.

Thank you again for your testimony and your attention to these questions.

Sincerely,

XAVIER BECERRA
Ranking Member
Subcommittee on Social Security

SOCIAL SECURITY
Office of the Chief Actuary

November 1, 2016

The Honorable Sam Johnson
Chairman, Subcommittee on Social Security
Committee on Ways and Means
House of Representatives
Washington, DC 20515

Dear Mr. Johnson:

Thank you again for the opportunity to testify before the Committee on Ways and Means, Subcommittee on Social Security at the September 21, 2016, hearing on "Social Security's Solvency Challenge." It is always a pleasure working with you, Amy Shuart, and everyone associated with the Subcommittee. I hope the information that I provided at the hearing will be helpful. Below I have restated the seven questions you sent to me on October 5, 2016, and have provided answers.

1. **In your testimony you mention that the Trustees make gradual changes to assumptions and do so only after there's "compelling evidence" for the change. What does it take for something to be "compelling evidence?"**

   Thank you for the opportunity to clarify. Of course, we update our projections every year with all data available since the previous report. This often results in small changes in near-term assumptions over the first 5 or 10 years of the projection period. A 10-year window is generally used for budget estimates. However, a single year's new data is seldom compelling as a basis for a change in the long-term or ultimate assumptions used for periods between 10 and 75 years into the future. These longer time horizons must be considered in assessing the actuarial status of the Social Security and Medicare Trust Funds. We have historically made significant changes in Trustees Report ultimate assumptions only when there has been a fundamental change in the long-range outlook for a particular parameter, based on accumulating experience that differs from the past and an understanding of changes in conditions that that are expected to persist into the future. One example is the drop in the birth rate in the United States after 1965, when birth control became widely available and women participated much more in higher education and the workforce. This has proven to be a structural change in our society and Trustees Report ultimate assumptions reflect this. In other cases, experience can change temporarily due to cyclical conditions, like an economic recession or a recovery. Again, birth rates provide a good example. The birth rate has dropped somewhat in the recent

economic downturn, well below a level consistent with expectations of women in national surveys. In a case like this, a Trustees Report ultimate assumption is generally not modified unless the changed experience extends, and a rationale becomes evident for believing that the change will be permanent.

2. **The Trustees and the Congressional Budget Office (CBO) are looking at the same, or at least very similar, historical data on earnings growth, but come to very different conclusions about the share of earnings that will be subject to payroll taxes. Can you please explain why this is? Please also provide the dollar values equivalent to 90% of covered earnings for each of the next 10 years.**

   We monitor growth in average earnings levels and the distribution of earnings very closely. We determine the growth in average wage levels in the U.S. economy annually in order to update several program parameters, like the taxable maximum level of earnings covered under the program. As indicated in my testimony, the percentage of OASDI covered earnings that is below the taxable maximum has fallen between 1983 and 2001, from 89.3 percent to 84.3 percent. The ratio of taxable to total covered earnings declined at a rapid rate of 0.32 percent per year over this period. However, between 2001 and 2014, this ratio dropped from 84.3 to 83.0 percent, declining at a much slower rate of 0.12 percent per year. The overall drop in this ratio over the past 31 years (1983 to 2014) has been large, but slowing. We believe that this trend will continue to slow, with the ratio reaching 82.5 percent by 2027, declining at a slower rate of 0.04 percent per year. We believe that there is a limit to the degree to which earned income will be concentrated in only the top six percent of workers – in other words, workers who earn more than the taxable maximum amount ($118,500 for 2016, and $127,200 for 2017). CBO, on the other hand, assumes that concentration of earnings will accelerate to a pace not seen in the past. CBO projects a ratio of about 77.4 percent by 2027, for an average annual rate of decline of 0.53 percent, or nearly twice the rate of decline experienced from 1983 to 2001.

   Under the intermediate assumptions of the 2016 Trustees Report, we project the dollar values for the annual taxable maximum amounts that would be needed to have 90 percent of covered earnings subject to the OASDI payroll tax for years 2016 through 2025 are $269,700, $282,900, $295,800, $307,800, $318,900, $330,000, $339,300, $347,700, 356,400, and $365,400, respectively.

3. **The Social Security Advisory Board periodically convenes a Technical Panel to examine the Trustees' assumptions and methods. The Technical Panel then publishes a report with detailed recommendations for changes. These panels have consistently called for the Trustees to increase assumptions about life expectancy. However, the Trustees have not followed this recommendation. In general, how is the decision made about whether or not to accept the Technical Panels' recommendations? What is the process for determining which of the Technical Panel's recommendations to follow? Specifically, why have the Trustees not adopted the Technical Panel's life expectancy recommendations?**

Our recommendations to the Board of Trustees and their selections reflect careful consideration of information from all sources at our disposal. Technical Panels appointed by quadrennial Advisory Councils through 1996 and more recently by the Social Security Advisory Board are one of these sources. In the area of mortality analysis and projection, we work closely with medical professionals, biologists, medical researchers, and demographers. Recent Technical Panels have included demographers who model past trends and tend to assume that future trends will be similar to those in the past. Medical clinicians and researchers, as well as biologists, tend to take a different approach, by considering what advances have led to mortality improvement in the past and contemplating what advances are currently in process or are expected for the future.

In addition, biological considerations suggest that increases in life expectancy cannot continue at the pace that they did in the 20th century, because human beings are inherently subject to certain physiological limitations. For example, with all the advances in medicine, public health and safety, nutrition, and understanding of healthy human behavior, there is still no record of any person living beyond age 122. We believe that progress will continue and more people will approach this very high age, but it is unlikely that a significant number of people will live beyond that point. In the absence of dramatic breakthroughs that could stop or reverse the aging process, we agree with many biologists that the rate of decline in mortality will slow in the future.

The 2015 Technical Panel recommended retaining use of different rates of decline in mortality by age, and projecting by cause of death, as has been used for the Trustees Reports for many years. However, the panel did recommend a faster overall rate of decline than assumed in the Trustees Reports, suggesting a rate equivalent to the average rate experienced since about 1950. We believe that over the long run it is unlikely that such a rate will be sustained. Recent experience since 2009 has shown a marked reduction in mortality decline, and many who have suggested we will maintain the rate of the last 60 years are reassessing. In fact, the chairperson of the 2015 Technical Panel, upon publication of the 2016 Trustees Report showing continued slow improvement, stated that she was glad that the Trustees did not adopt the assumption for faster ultimate decline in mortality (see http://crr.bc.edu/wp-content/uploads/2016/06/IB_16-10.pdf).

It is informative to look at how actual experience compares to what we were projecting in the 1982 Trustees Report, which was the basis for the 1983 Social Security Amendments, where the normal retirement age was increased for the first time. At that time, we projected that the average of life expectancy at age 65 for men and women in 2013 would be 19.0 years, or 2.8 years higher than in 1978 (the last year for which final data were available). In fact, this life expectancy actually rose by 2.9 years over this period, to 19.1 years for 2013 (the last year for which final data were available for the 2016 Trustees Report).

4. **Similarly, the Technical Panel has consistently called for lower expectations for interest rates, but the Trustees have not followed this recommendation. Why have the Trustees not adopted the Technical Panel's recommendation to reduce expectations for interest rates?**

The ultimate real interest rate was reduced from 3.0 to 2.9 percent for the 2006 Trustees Report, and was reduced further to 2.7 percent for the 2016 Trustees Report. While the 2015 Technical Panel recommended assuming a long-term ultimate real interest rate on Trust Fund reserves of 2.5 percent, the 2011 panel recommended 2.7 percent and the average recommendation of the last five technical panels is 2.7 percent. Real interest rates have been low since about 2000, reflecting several disruptions in the domestic and international economies, as well as the "great recession," from which we are still gradually recovering. Given current economic conditions, it is too early to conclude whether the recent low interest rates represent a true and permanent reduction in the return to capital, or whether they are temporary. The gradual changes in ultimate interest rates made in Trustees Reports reflect the very long-term focus of analysis for assessing the actuarial status of the OASDI program. The federal budget traditionally focuses on much shorter periods, and it tends to reflect the very recent experience to a much greater degree.

5. **In your testimony you allude to the role of the Trustees' Working Group. Can you please specify who participates in the Trustees' Working Group? Are the members of the Working Group political appointees or civil servants? What role does the Trustees' Working Group play in developing the Trustees Report?**

   The Trustees Working Group includes the Trustees themselves, to the degree they are able to participate. The Public Trustees traditionally participate directly, with some staff assistance provided by the Social Security Administration (SSA). The four ex-officio Trustees are generally represented in working group discussions by high-ranking political appointees in their agencies. Additionally, the Chief Actuaries of SSA and CMS, both civil servants, are members of the working group. Additional individuals from the four agencies and the actuarial offices participate in working group discussions.

   In development of the Trustees Reports, the SSA Chief Actuary recommends assumptions related to demographic and economic factors, as well as OASDI program specific factors such as disability rates. The CMS Chief Actuary recommends assumptions related to Medicare utilization and reimbursement rates. The working group as a whole discusses these recommendation and then works directly with the Trustees to gain consensus. The actuarial offices draft the reports with review and input from the Trustees and the working group. Finally, the Chief Actuaries provide the actuarial opinions for each report as required by law.

6. **At the beginning of an Administration, new appointees across the government must be confirmed, including the four positions that serve as Trustees in addition to their agency duties. This process can end after the statutory deadline for the Trustees Report, as was the case for President Obama's first Secretary of Health and Human Services. In absence of a confirmed Administration Trustee, who makes decisions about the assumptions and methods that are used in the Trustees Report?**

Generally, the first Trustees Report issued in a new administration reflects little or no significant changes in ultimate assumptions. For reasons indicated in this question, there may not be time for careful consideration by the new administration without delaying the issuance of the reports. In some instances, one or more of the Trustees have been acting in their position at the time of report release (for example, in 2001). Following this conservative approach has generally avoided the need for decisions on any assumption or method changes in the absence of confirmed appointees from the new administration. Of course, additional data are reflected even when no changes in ultimate assumptions are made.

7. **The Office of the Chief Actuary has been making demographic and economic assumptions for years. Based on data from the past 10 years, please provide a table comparing your projected values for each assumption to what actually happened over that time period.**

   The enclosed tables provide actual and projected values for calendar years 2005 through 2015 used for the 2007 through 2016 Trustees Reports. Tables are provided for the principal demographic and economic assumptions, and related summary measures that are defined in the Trustees Report. Note that in some cases "actual" values for historical years available at the time of one Trustees Report are later revised for use in subsequent reports. Values for many of these measures were heavily influenced by the recession that began in 2008, which was not anticipated, has been unusually severe, and from which recovery has been unusually slow.

I hope this further information will be helpful. If you have any additional questions or need assistance in any way, please let me know.

Sincerely,

Stephen C. Goss, ASA, MAAA
Chief Actuary

Enclosures

cc: Amy Shuart

Actual vs. Projected Trustees Report Total Fertility Rates
(Estimated actual at time of report above the line, estimated/projected below the line)

	Year of Issuance of Trustees Report									
Year	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
2005	2.04	2.05	2.06	2.07	2.06	2.06	2.06	2.06	2.06	2.06
2006	2.04	2.06	2.10	2.12	2.12	2.12	2.11	2.11	2.11	2.11
2007	2.04	2.06	2.10	2.12	2.13	2.13	2.12	2.12	2.12	2.12
2008	2.04	2.06	2.08	2.09	2.09	2.08	2.07	2.07	2.07	2.07
2009	2.04	2.06	2.08	2.09	2.03	2.01	2.00	2.00	2.00	2.00
2010	2.03	2.06	2.08	2.08	2.08	1.95	1.93	1.93	1.93	1.93
2011	2.03	2.05	2.07	2.08	2.07	2.03	1.89	1.89	1.89	1.89
2012	2.03	2.05	2.07	2.08	2.07	2.04	1.90	1.88	1.88	1.87
2013	2.03	2.05	2.07	2.07	2.07	2.05	1.91	1.89	1.87	1.85
2014	2.03	2.05	2.06	2.07	2.06	2.05	1.93	1.91	1.88	1.86
2015	2.03	2.04	2.06	2.07	2.06	2.06	1.95	1.94	1.91	1.87

Actual vs. Projected Trustees Report Life Expectancy at Birth
(Estimated actual at time of report above the line, estimated/projected below the line)

	Year of Issuance of Trustees Report									
Year	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
2005	77.2	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
2006	77.3	77.4	77.4	77.6	77.6	77.6	77.6	77.6	77.6	77.6
2007	77.4	77.5	77.5	77.6	77.8	77.8	77.9	77.9	77.9	77.9
2008	77.5	77.6	77.6	77.8	77.8	77.8	77.9	77.9	77.9	77.9
2009	77.6	77.7	77.7	77.9	77.9	77.9	78.3	78.3	78.3	78.3
2010	77.7	77.8	77.8	78.0	78.1	78.1	78.3	78.5	78.5	78.5
2011	77.8	77.9	77.9	78.1	78.2	78.2	78.5	78.5	78.5	78.5
2012	77.9	78.0	78.0	78.2	78.3	78.3	78.6	78.7	78.6	78.6
2013	78.0	78.1	78.1	78.3	78.4	78.4	78.8	78.8	78.9	78.6
2014	78.1	78.2	78.3	78.5	78.5	78.5	78.9	79.0	79.0	78.9
2015	78.2	78.3	78.4	78.6	78.6	78.6	79.0	79.2	79.2	79.1

Actual vs. Projected Trustees Report Life Expectancy at Age 65
(Estimated actual at time of report above the line, estimated/projected below the line)

	Year of Issuance of Trustees Report									
Year	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
2005	17.8	17.9	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1
2006	17.8	17.9	18.1	18.4	18.4	18.4	18.4	18.4	18.4	18.4
2007	17.8	18.0	18.1	18.3	18.6	18.6	18.6	18.6	18.6	18.6
2008	17.9	18.0	18.1	18.4	18.5	18.5	18.6	18.6	18.6	18.6
2009	17.9	18.1	18.2	18.5	18.6	18.6	18.9	18.9	18.9	18.9
2010	18.0	18.1	18.2	18.5	18.7	18.7	18.9	18.9	18.9	18.9
2011	18.0	18.2	18.3	18.6	18.8	18.8	19.1	19.0	19.0	19.0
2012	18.1	18.2	18.3	18.6	18.9	18.9	19.2	19.2	19.1	19.1
2013	18.1	18.3	18.4	18.7	19.0	19.0	19.3	19.3	19.2	19.1
2014	18.2	18.3	18.4	18.7	19.1	19.1	19.4	19.4	19.4	19.2
2015	18.2	18.4	18.5	18.8	19.2	19.2	19.5	19.5	19.5	19.4

Actual vs. Projected Trustees Report Net Immigration (in thousands)
(Estimated actual at time of report above the line, estimated/projected below the line)

	Year of Issuance of Trustees Report									
Year	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
2005	1,242	1,315	1,310	1,310	1,885	1,915	2,010	2,010	2,015	2,010
2006	1,075	1,330	1,375	1,375	1,585	1,620	1,710	1,710	1,715	1,710
2007	1,075	1,275	1,270	1,355	780	810	870	870	875	872
2008	1,000	1,255	1,235	1,310	35	65	75	75	80	81
2009	1,000	1,230	1,215	1,255	840	870	935	935	935	938
2010	1,000	1,195	1,190	1,215	820	840	835	835	840	838
2011	1,000	1,185	1,180	1,175	895	900	870	870	725	725
2012	1,000	1,180	1,175	1,170	960	960	1,075	1,165	1,010	1,011
2013	1,000	1,170	1,165	1,165	1,060	1,060	1,155	1,280	960	1,094
2014	1,000	1,165	1,160	1,160	1,160	1,160	1,225	1,345	1,150	1,316
2015	1,000	1,160	1,155	1,150	1,250	1,250	1,215	1,325	1,465	1,557

Actual vs. Projected Trustees Report Age-Sex Adjusted Disabled-Worker Incidence Rates
(Estimated actual at time of report above the line, estimated/projected below the line)

	Year of Issuance of Trustees Report									
Year	**2007**	**2008**	**2009[a]**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
2005	5.4	5.4	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
2006	5.1	5.1	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
2007	5.1	5.1	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
2008	5.0	5.1	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
2009	5.1	5.1	5.8	6.0	6.0	6.1	6.0	6.0	6.0	6.0
2010	5.2	5.2	6.5	6.6	6.3	6.4	6.4	6.4	6.4	6.4
2011	5.1	5.1	6.1	6.3	6.3	6.0	6.1	6.1	6.1	6.1
2012	5.2	5.2	5.6	6.2	6.2	6.0	5.8	5.8	5.8	5.8
2013	5.2	5.2	5.1	5.6	5.7	5.8	5.4	5.2	5.2	5.2
2014	5.2	5.2	5.1	5.4	5.5	5.7	5.6	5.0	4.6	4.7
2015	5.2	5.2	5.1	5.2	5.3	5.6	5.5	5.2	4.9	4.4

[a] Revised method for estimating disability-exposed population resulted in an increase in incidence rates.

Note: The disability incidence rate is the ratio of the number of new beneficiaries awarded benefits each year to the disability-exposed population, the number of individuals who meet insured requirements but are not yet receiving benefits. The historical disability-exposed population changes to reflect data updates.

Actual vs. Projected Trustees Report Age-Sex Adjusted Disabled-Worker Death Rates
(Estimated actual at time of report above the line, estimated/projected below the line)

	Year of Issuance of Trustees Report									
Year	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
2005	30.2	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
2006	29.5	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8
2007	27.4	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9
2008	26.9	27.4	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7
2009	26.4	26.9	26.8	27.2	27.2	27.2	27.2	27.2	27.2	27.2
2010	26.0	26.4	26.4	26.5	26.3	26.3	26.3	26.3	26.3	26.3
2011	25.6	26.0	25.9	26.0	25.7	26.0	26.0	26.0	26.0	26.0
2012	25.1	25.6	25.5	25.6	25.0	25.4	26.5	26.5	26.5	26.5
2013	24.7	25.2	25.2	25.1	24.4	24.8	25.9	25.7	25.7	25.7
2014	24.3	24.9	24.8	24.7	23.9	24.2	25.3	25.1	25.6	25.6
2015	23.8	24.5	24.5	24.2	23.3	23.8	24.8	24.8	25.3	25.7

Actual vs. Projected Trustees Report Age-Sex Adjusted Disabled-Worker Recovery Rates
(Estimated actual at time of report above the line, estimated/projected below the line)

	Year of Issuance of Trustees Report									
Year	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
2005	13.5	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4
2006	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4
2007	11.6	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
2008	15.2	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
2009	16.2	11.0	10.7	9.1	9.4	9.4	9.4	9.4	9.4	9.4
2010	17.6	13.2	11.7	10.6	10.5	10.5	10.5	10.5	10.5	10.5
2011	14.8	11.0	10.6	9.6	11.2	9.9	9.9	9.9	9.9	9.9
2012	15.1	12.0	12.3	11.4	12.0	11.4	9.7	9.7	9.7	9.7
2013	15.2	12.1	13.1	11.9	12.8	12.3	11.3	8.5	8.5	8.5
2014	15.2	12.3	13.2	12.6	13.4	11.9	12.5	11.5	11.3	11.3
2015	15.1	12.6	11.8	13.0	13.0	11.1	13.0	12.6	11.8	13.4

Actual vs. Projected Trustees Report Annual Percent Change in Total-Economy Labor Productivity
(Estimated actual at time of report above the line, estimated/projected below the line)

	Year of Issuance of Trustees Report									
Year	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
2005	1.80	1.50	1.40	1.50	1.50	1.51	1.51	1.84	1.83	1.83
2006	2.00	1.00	0.90	0.80	0.80	0.82	0.82	0.84	0.84	0.84
2007	1.70	1.40	1.30	1.50	1.20	1.21	1.22	1.06	1.04	1.04
2008	2.10	1.90	1.80	1.40	1.10	0.75	0.74	0.77	0.75	0.75
2009	1.90	1.90	0.30	2.50	2.90	2.13	2.60	2.88	2.87	2.87
2010	1.90	1.80	2.80	3.70	2.70	3.07	2.39	2.52	2.55	2.55
2011	1.80	1.80	2.30	1.60	1.70	0.40	0.30	0.28	0.05	0.07
2012	1.80	1.80	1.90	1.50	2.00	1.09	0.66	1.04	0.58	0.47
2013	1.70	1.80	1.90	1.50	2.00	2.07	0.68	0.73	0.95	0.21
2014	1.70	1.70	1.80	1.40	1.90	2.10	1.96	1.57	0.56	0.49
2015	1.70	1.70	1.70	1.40	1.70	2.06	2.06	1.92	1.77	0.44

Actual vs. Projected Trustees Report Annual Percent Change in Earnings as Percent of Compensation
(Estimated actual at time of report above the line, estimated/projected below the line)

	Year of Issuance of Trustees Report									
Year	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
2005	-0.50	-0.40	-0.40	-0.40	-0.40	-0.43	-0.43	-0.22	-0.22	-0.22
2006	0.00	0.10	0.40	0.50	0.50	0.50	0.50	0.49	0.49	0.49
2007	0.10	0.00	0.40	0.20	0.40	0.39	0.39	-0.05	-0.05	-0.05
2008	0.00	0.00	-0.20	-0.20	-0.40	-0.62	-0.62	-0.06	-0.06	-0.06
2009	-0.10	-0.10	-0.20	-0.90	-1.20	-1.21	-1.04	-0.66	-0.66	-0.66
2010	-0.10	-0.10	-0.50	0.20	-0.10	0.25	0.20	-0.17	-0.10	-0.1
2011	-0.20	-0.20	-0.20	0.10	0.20	0.20	-0.04	0.34	0.28	0.28
2012	-0.20	-0.20	-0.20	0.20	0.20	0.04	0.03	0.31	0.49	0.4
2013	-0.20	-0.20	-0.30	0.10	0.00	-0.02	0.02	0.30	0.09	0.01
2014	-0.20	-0.20	-0.30	-0.20	-0.30	-0.17	-0.04	-0.14	0.15	0.39
2015	-0.20	-0.20	-0.10	-0.20	-0.30	-0.12	-0.01	-0.17	-0.10	0.11

Actual vs. Projected Trustees Report Annual Percent Change in Average Hours Worked per Week
(Estimated actual at time of report above the line, estimated/projected below the line)

	Year of Issuance of Trustees Report									
Year	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
2005	-0.40	-0.20	-0.20	-0.20	-0.20	-0.18	-0.18	-0.23	-0.23	-0.23
2006	-0.40	0.00	0.00	0.00	0.00	-0.02	-0.02	-0.04	-0.03	-0.03
2007	-0.10	-0.30	-0.40	-0.40	-0.40	-0.41	-0.42	-0.38	-0.38	-0.38
2008	0.00	-0.10	-0.20	-0.50	-0.70	-0.64	-0.63	-0.62	-0.60	-0.6
2009	0.00	0.00	-0.10	-1.20	-1.80	-1.87	-1.90	-1.89	-1.85	-1.85
2010	0.00	0.00	0.00	-0.40	0.70	0.53	0.59	0.57	0.56	0.56
2011	0.00	0.00	0.00	0.40	0.20	0.81	0.94	0.99	0.98	0.97
2012	0.00	0.00	0.00	0.40	0.00	0.22	-0.21	-0.07	-0.06	-0.05
2013	0.00	0.00	0.00	0.20	0.00	0.00	0.30	0.11	0.27	0.29
2014	0.00	0.00	0.00	0.10	0.00	0.06	0.09	0.17	0.19	0.31
2015	0.00	0.00	0.00	0.00	0.00	0.10	0.17	0.08	0.21	0.37

Actual vs. Projected Trustees Report Percent Change in Annual GDP Price Index
(Estimated actual at time of report above the line, estimated/projected below the line)

	Year of Issuance of Trustees Report									
Year	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
2005	3.00	3.20	3.30	3.30	3.30	3.32	3.32	3.21	3.22	3.22
2006	2.90	3.20	3.20	3.30	3.30	3.24	3.24	3.07	3.07	3.07
2007	2.00	2.70	2.70	2.90	2.90	2.90	2.90	2.66	2.67	2.67
2008	2.00	2.00	2.20	2.10	2.20	2.20	2.20	1.92	1.93	1.93
2009	2.30	2.10	1.10	1.20	0.90	1.08	0.89	0.80	0.79	0.79
2010	2.40	2.40	1.10	1.30	1.00	1.16	1.34	1.22	1.23	1.23
2011	2.40	2.40	1.50	1.40	1.20	2.13	2.13	1.96	2.06	2.06
2012	2.40	2.40	1.90	1.90	1.30	1.70	1.84	1.75	1.80	1.84
2013	2.40	2.40	2.20	2.30	1.50	1.43	1.83	1.39	1.49	1.63
2014	2.40	2.40	2.50	2.40	1.60	1.63	1.71	1.44	1.54	1.64
2015	2.40	2.40	2.40	2.40	1.60	1.72	2.02	1.55	1.00	1.01

Actual vs. Projected Trustees Report Annual Percent Change in Average Wage in Covered Employment
(Estimated actual at time of report above the line, estimated/projected below the line)

	Year of Issuance of Trustees Report									
Year	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
2005	3.90	3.70	3.60	3.60	3.70	3.72	3.72	3.70	3.69	3.71
2006	4.90	5.00	4.80	4.70	4.60	4.76	4.74	4.72	4.71	4.74
2007	4.60	4.40	4.20	4.70	4.70	4.47	4.48	4.50	4.52	4.49
2008	4.60	4.10	3.30	2.00	2.30	2.23	2.23	2.47	2.34	2.41
2009	4.30	4.20	0.70	-0.60	-1.80	-1.35	-1.47	-1.52	-1.43	-1.59
2010	4.20	4.00	3.40	5.10	2.90	2.45	2.62	2.69	2.62	2.58
2011	4.10	3.90	4.10	3.80	4.10	3.60	2.68	3.16	3.13	3.12
2012	4.20	4.00	4.10	4.70	4.50	3.75	2.32	2.69	3.21	3.35
2013	4.00	4.00	4.20	4.80	4.60	3.93	2.67	1.92	1.10	1.13
2014	3.80	3.90	4.10	4.60	4.20	4.59	4.60	3.78	3.24	3.44
2015	3.90	3.90	4.20	4.30	3.90	4.79	5.52	4.92	3.38	2.74

Actual vs. Projected Trustees Report Percent Change in Annual CPI-W
(Estimated actual at time of report above the line, estimated/projected below the line)

	Year of Issuance of Trustees Report									
Year	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
2005	3.50	3.50	3.50	3.50	3.50	3.52	3.52	3.52	3.52	3.52
2006	3.30	3.20	3.20	3.20	3.20	3.19	3.19	3.19	3.19	3.19
2007	1.90	2.80	2.90	2.90	2.90	2.88	2.88	2.88	2.88	2.88
2008	2.40	2.80	4.30	4.10	4.10	4.09	4.09	4.09	4.09	4.09
2009	2.70	2.50	-1.00	-0.70	-0.70	-0.67	-0.67	-0.67	-0.67	-0.67
2010	2.80	2.80	1.70	2.00	2.10	2.07	2.07	2.07	2.07	2.07
2011	2.80	2.80	2.30	1.70	1.20	3.70	3.56	3.56	3.56	3.56
2012	2.80	2.80	2.70	2.30	1.70	2.01	2.07	2.10	2.10	2.10
2013	2.80	2.80	3.10	2.70	1.90	1.93	1.80	1.43	1.37	1.37
2014	2.80	2.80	3.10	2.80	2.00	2.03	2.21	1.61	1.49	1.50
2015	2.80	2.80	2.80	2.80	2.00	2.12	2.42	1.95	0.20	-0.40

Actual vs. Projected Trustees Report Real Wage Differential
(Estimated actual at time of report above the line, estimated/projected below the line)

	Year of Issuance of Trustees Report									
Year	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
2005	0.30	0.10	0.10	0.10	0.20	0.20	0.20	0.18	0.17	0.19
2006	1.60	1.80	1.60	1.50	1.40	1.57	1.55	1.53	1.52	1.54
2007	2.70	1.60	1.30	1.80	1.80	1.59	1.61	1.62	1.64	1.62
2008	2.20	1.30	-1.00	-2.10	-1.80	-1.85	-1.85	-1.62	-1.74	-1.68
2009	1.70	1.70	1.80	0.00	-1.20	-0.68	-0.79	-0.85	-0.76	-0.91
2010	1.40	1.30	1.80	3.10	0.80	0.38	0.55	0.62	0.55	0.51
2011	1.30	1.10	1.80	2.20	2.90	-0.10	-0.88	-0.39	-0.42	-0.43
2012	1.40	1.20	1.40	2.40	2.90	1.74	0.25	0.59	1.11	1.25
2013	1.20	1.20	1.10	2.20	2.70	2.00	0.87	0.49	-0.27	-0.24
2014	1.00	1.10	1.00	1.80	2.20	2.56	2.40	2.18	1.75	1.94
2015	1.10	1.10	1.40	1.50	1.90	2.67	3.10	2.97	3.18	3.17

Actual vs. Projected Trustees Report Real Annual Unemployment Rate
(Estimated actual at time of report above the line, estimated/projected below the line)

	Year of Issuance of Trustees Report									
Year	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
2005	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
2006	4.7	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
2007	4.8	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
2008	4.9	4.8	5.7	5.8	5.8	5.8	5.8	5.8	5.8	5.8
2009	5.0	5.0	8.2	9.3	9.3	9.3	9.3	9.3	9.3	9.3
2010	5.1	5.2	8.8	10.0	9.7	9.6	9.6	9.6	9.6	9.6
2011	5.2	5.3	7.9	9.5	9.5	9.0	9.0	8.9	8.9	8.9
2012	5.3	5.4	6.8	8.6	8.9	8.9	8.1	8.1	8.1	8.1
2013	5.4	5.5	6.2	7.7	8.0	8.7	8.0	7.4	7.4	7.4
2014	5.5	5.5	5.8	7.0	7.2	8.2	7.8	6.9	6.2	6.2
2015	5.5	5.5	5.6	6.3	6.5	7.4	7.2	6.7	5.5	5.3

Actual vs. Projected Trustees Report Annual Percent Change in Labor Force
(Estimated actual at time of report above the line, estimated/projected below the line)

	Year of Issuance of Trustees Report									
Year	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
2005	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
2006	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
2007	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
2008	1.0	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
2009	0.9	1.1	0.3	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
2010	0.9	1.1	0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
2011	0.9	0.9	1.0	0.7	0.5	-0.2	-0.2	-0.2	-0.2	-0.2
2012	0.7	0.8	1.1	1.1	0.7	1.2	0.9	0.9	0.9	0.9
2013	0.6	0.7	1.0	1.1	0.9	0.7	0.8	0.3	0.3	0.3
2014	0.5	0.7	0.9	1.1	1.0	0.8	1.1	0.8	0.3	0.3
2015	0.5	0.6	0.7	0.9	0.9	0.9	0.6	1.1	0.6	0.8

Actual vs. Projected Trustees Report Annual Percent Change in Employment
(Estimated actual at time of report above the line, estimated/projected below the line)

	Year of Issuance of Trustees Report									
Year	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
2005	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
2006	1.1	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
2007	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
2008	0.8	0.4	-0.4	-0.5	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
2009	0.9	0.9	-2.3	-3.7	-3.7	-3.7	-3.7	-3.7	-3.7	-3.7
2010	0.8	0.9	-0.4	-0.9	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
2011	0.8	0.7	2.0	1.2	0.7	0.5	0.6	0.6	0.6	0.6
2012	0.6	0.7	2.2	2.0	1.4	1.3	1.8	1.8	1.8	1.8
2013	0.5	0.6	1.7	2.1	1.7	0.8	1.2	1.0	1.0	1.0
2014	0.4	0.7	1.2	1.9	1.9	1.3	1.3	1.3	1.5	1.6
2015	0.5	0.6	0.9	1.6	1.7	1.8	1.7	1.3	1.3	1.7

Actual vs. Projected Trustees Report Annual Percent Change in Real GDP
(Estimated actual at time of report above the line, estimated/projected below the line)

	Year of Issuance of Trustees Report									
Year	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
2005	3.2	3.1	2.9	3.1	3.1	3.1	3.1	3.4	3.3	3.3
2006	3.3	2.9	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7
2007	2.6	2.2	2.0	2.1	1.9	1.9	1.9	1.8	1.8	1.8
2008	3.0	2.3	1.1	0.4	0.0	-0.3	-0.3	-0.3	-0.3	-0.3
2009	2.8	2.8	-0.9	-2.4	-2.6	-3.5	-3.1	-2.8	-2.8	-2.8
2010	2.6	2.7	1.2	2.3	2.8	3.0	2.4	2.5	2.5	2.5
2011	2.6	2.5	2.0	3.3	2.7	1.7	1.8	1.8	1.6	1.6
2012	2.4	2.5	2.1	4.0	3.4	2.6	2.3	2.8	2.3	2.2
2013	2.2	2.5	1.9	3.9	3.8	2.9	2.2	1.8	2.2	1.7
2014	2.1	2.4	1.6	3.5	3.8	3.5	3.4	3.1	2.3	2.4
2015	2.2	2.3	1.4	3.1	3.5	4.0	4.0	3.3	3.3	2.6

Actual vs. Projected Trustees Report Real Interest Rates for First Year after Issue
(Estimated actual at time of report above the line, estimated/projected below the line)

	Year of Issuance of Trustees Report									
Year	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
2005	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
2006	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
2007	2.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
2008	2.2	1.9	0.4	0.6	0.6	0.6	0.6	0.6	0.6	0.6
2009	2.5	1.9	4.7	4.4	4.4	4.4	4.4	4.4	4.4	4.4
2010	2.8	2.3	1.3	0.9	0.9	0.9	0.9	0.9	0.9	0.9
2011	2.9	2.8	1.6	1.7	1.5	-0.9	-0.7	-0.7	-0.7	-0.7
2012	2.9	2.9	2.3	2.2	1.4	0.4	0.4	0.3	0.3	0.3
2013	3.0	3.0	2.6	2.9	2.5	0.5	-0.3	0.0	0.1	0.1
2014	3.0	3.0	3.0	3.2	3.1	1.4	-0.6	0.3	0.4	0.4
2015	3.0	3.0	3.2	3.3	3.2	2.3	0.4	0.9	2.1	2.7

Actual vs. Projected Trustees Report Taxable Ratio [a]
(Estimated actual at time of report above the line, estimated/projected below the line)

	Year of Issuance of Trustees Report									
Year	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
2005	83.4	83.3	83.6	83.4	83.3	83.4	83.3	83.3	83.4	83.5
2006	82.9	83.0	83.1	83.0	83.1	83.0	82.9	83.0	83.0	83.1
2007	82.8	82.4	82.4	81.9	82.1	82.2	82.2	82.3	82.3	82.4
2008	82.8	82.9	83.8	82.3	83.2	83.4	83.3	83.2	83.3	83.4
2009	82.7	82.9	84.9	85.1	85.0	84.9	85.0	85.0	85.0	85.2
2010	82.8	82.9	84.2	84.3	83.9	83.9	83.7	83.7	83.8	84.0
2011	82.7	82.9	83.3	83.6	83.4	82.6	83.2	82.9	83.0	83.3
2012	82.8	82.8	83.5	83.6	83.1	82.6	83.3	82.5	82.3	82.5
2013	82.7	82.8	83.2	83.2	82.8	82.5	83.5	82.4	82.8	83.3
2014	82.8	82.7	83.0	82.9	82.7	82.3	83.0	82.5	82.4	83.0
2015	82.7	82.7	82.8	82.8	82.6	82.1	82.4	82.2	82.2	82.2 [b]

[a] Ratio of effective taxable payroll to total OASDI covered earnings.

[b] Revised estimate for 2015 based on data available after the 2016 Trustees Report is 82.7.

COMMITTEE ON WAYS AND MEANS

U.S. HOUSE OF REPRESENTATIVES
WASHINGTON, DC 20515

October 5, 2016

Stephen C. Goss
Chief Actuary
Social Security Administration
6401 Security Boulevard
Room 700 Altmeyer Building
Baltimore, MD 21235

Dear Mr. Goss,

Thank you for your testimony before the Committee on Ways and Means Subcommittee on Social Security at the September 21, 2016 hearing on "Understanding Social Security's Solvency Challenge." In order to complete our hearing record, we would appreciate your responses to the following questions:

1. In your testimony you mention that the Trustees make gradual changes to assumptions and do so only after there's "compelling evidence" for the change. What does it take for something to be "compelling evidence?"

2. The Trustees and the Congressional Budget Office (CBO) are looking at the same, or at least very similar, historical data on earnings growth, but come to very different conclusions about the share of earnings that will be subject to payroll taxes. Can you please explain why this is? Please also provide the dollar values equivalent to 90% of covered earnings for each of the next 10 years.

3. The Social Security Advisory Board periodically convenes a Technical Panel to examine the Trustees' assumptions and methods. The Technical Panel then publishes a report with detailed recommendations for changes. These panels have consistently called for the Trustees to increase assumptions about life expectancy. However, the Trustees have not followed this recommendation. In general, how is the decision made about whether or not to accept the Technical Panels' recommendations? What is the process for determining which of the Technical Panels' recommendations to follow? Specifically, why have the Trustees not adopted the Technical Panel's life expectancy recommendations?

4. Similarly, the Technical Panel has consistently called for lower expectations for interest rates, but the Trustees have not followed this recommendation. Why have the Trustees not adopted the Technical Panel's recommendation to reduce expectations for interest rates?

5. In your testimony you allude to the role of the Trustees' Working Group. Can you please specify who participates in the Trustees' Working Group? Are the members of the Working Group political appointees or civil servants? What role does the Trustees' Working Group play in developing the Trustees Report?

6. At the beginning of an Administration, new appointees across the government must be confirmed, including the four positions that serve as Trustees in addition to their agency duties. This process can end after the statutory deadline for the Trustees Report, as was the case for President Obama's first Secretary of Health and Human Services. In absence of a confirmed Administration Trustee, who makes decisions about the assumptions and methods that are used in the Trustees Report?

7. The Office of the Chief Actuary has been making demographic and economic assumptions for years. Based on data from the past 10 years, please provide a table comparing your projected values for each assumption to what actually happened over that time period.

We would appreciate your responses to these questions by **October 19, 2016**. Please send your response to the attention of Amy Shuart, Staff Director, Subcommittee on Social Security, Committee on Ways and Means, U.S. House of Representatives, B-317 Rayburn House Office Building, Washington, DC 20515. In addition to a hard copy, please submit an electronic copy of your response in Microsoft Word format to mm.russell@mail.house.gov.

Thank you for taking the time to answer these questions for the record. If you have any questions concerning this request, you may reach Amy at (202) 225-9263.

Sincerely,

Sam Johnson

Sam Johnson
Chairman
Subcommittee on Social Security

Congressional Budget Office

NOVEMBER 16, 2016

Answers to Questions for the Record From Chairman Johnson Following a Hearing by the House Ways and Means Subcommittee on Social Security on Understanding Social Security's Solvency Challenge

On September 21, 2016, the House Ways and Means Subcommittee on Social Security convened a hearing at which Keith Hall, Director of the Congressional Budget Office, testified about CBO's long-term projections (www.cbo.gov/publication/51988). After the hearing, Chairman Johnson submitted questions for the record. This document provides CBO's answers.

Question: The Congressional Budget Office has made changes to assumptions that have significantly changed the projected actuarial balance from one year to the next. This seems to be different than the Trustees' approach where it's more about gradual changes. Can you please discuss why CBO takes this approach?

Answer: CBO produces independent and impartial analyses of budgetary and economic issues and considers it a priority to ensure that the agency's current-law budgetary and economic projections reflect the middle of the distribution of possible outcomes. The agency reviews historical data, the forecasts of other government agencies, and the academic literature, and it consults with its panels of advisers and other experts in the process of developing its projections.

CBO strives to update its projections as new information becomes available. Such updates sometimes can lead to substantial changes from one year to the next in CBO's projections of the 75-year actuarial balance for Social Security's trust funds, but CBO believes its approach provides the Congress with projections that incorporate the most current thinking. When the agency decides that relatively large revisions are warranted by new information and analysis, it explains the basis for those revisions.

Question: CBO and the Trustees are looking at the same, or at least very similar, historical data on earnings growth, but come to very different conclusions about the share of earnings that will be subject to payroll taxes. Can you please explain why this is? Please also provide the dollar values equivalent to 90 percent of covered earnings for each of the next 10 years.

Answer: The differences between CBO's and the Social Security Trustees' projections of the share of earnings that will be subject to payroll taxes are found in the two agencies' projections of growth in earnings for higher-income people. CBO's projections of the share of earnings below the maximum taxable amount ($118,500 in 2016) are made on the basis of its projections of the entire distribution of compensation; those projections underlie the

agency's revenue projections. (CBO revisits its projections as part of the development of each baseline forecast; the next revision will occur in January 2017.)

In CBO's current-law projections, the portion of earnings subject to the Social Security payroll tax falls from 82 percent in 2015 to below 78 percent by 2026 and remains near that level thereafter. Those projections reflect an expectation that earnings will grow faster for higher-income people than for others during the next decade. Specifically, CBO expects that the earnings share of the top 1 percent will continue to rise, as suggested by extrapolating the 30-year trend from 1978 to 2008 for the next few years and then projecting that trend for the remainder of the upcoming decade.[1] CBO's projections also reflect trends in the cost of health insurance and incorporate expected responses to future taxes on health insurance.

In contrast, the Trustees estimate that the portion of earnings covered by Social Security on which payroll taxes are collected will increase slightly between 2016 and 2025 before settling at 82.5 percent and remaining constant thereafter. The Trustees' projections suggest that the growth rate they anticipate for people's earnings will be similar, whether those earnings are above or below the taxable maximum.

CBO estimates that if lawmakers wished to raise the amount of covered earnings subject to the payroll tax from the current 82 percent to 90 percent, the taxable maximum would need to be set at $316,400 in 2017 and to rise to $565,000 by 2026 (see Table 1). If asked to estimate the effects of a proposal that increased the taxable maximum in that way, the staff of the Joint Committee on Taxation would provide the revenue estimate. They project that to subject 90 percent of covered earnings to the payroll tax, the taxable maximum would need to be set to $245,000 in 2017.

Question: Does CBO look at the recommendations put forth by the Social Security Advisory Board's Technical Panels?

Answer: The reports of the Social Security Advisory Board's Technical Panels on Assumptions and Methods are among the many sources CBO consults in developing its Social Security projections. CBO's analysts attend panel meetings and review reports, and CBO has incorporated various recommendations of those panels and of the Trustees into its analyses, including projections of total fertility rates, mortality rates, and rates of disability incidence.

Total Fertility Rates. In 2016, CBO lowered its projection of the total fertility rate for the 2016–2090 period from 2.0 to 1.9 children per woman. CBO's projection is consistent with that recommended by the technical panel.[2] Through 2015, CBO used the total fertility rate as projected by the Social Security Trustees. (That rate is the average number of children that a woman would have in her lifetime if, at each age of her life, she experienced the birthrate observed or assumed for that year and if she survived her entire childbearing period.) Fertility

1. See testimony of Keith Hall, Director, Congressional Budget Office, before the Subcommittee on Social Security of the House Committee on Ways and Means, *Comparing CBO's Long-Term Projections With Those of the Social Security Trustees* (September 21, 2016), pp. 7–8, www.cbo.gov/publication/51988.

2. See 2015 Technical Panel on Assumptions and Methods, *Report to the Social Security Advisory Board* (September 2015), p. 9, http://go.usa.gov/cJYR5 (PDF, 3.4 MB).

Table 1.

CBO's Estimate of the Taxable Maximum Required to Subject 90 Percent of Covered Earnings to the Social Security Payroll Tax, by Year

Nominal Dollars

Year	Taxable Maximum
2017	316,400
2018	338,200
2019	359,200
2020	382,200
2021	407,200
2022	434,100
2023	463,700
2024	495,400
2025	529,100
2026	565,000

Source: Congressional Budget Office.

rates often decline during recessions and rebound during recoveries. However, after the 2007–2009 recession, the U.S. fertility rate (which in 2007 was 2.1) dropped, and it has remained below 1.9 since then. For that reason—along with evidence that women are delaying childbearing to later ages—CBO lowered its projection this year.

Mortality Rates. CBO also has followed the technical panel's recommendations on mortality rates. Since 1995, the technical panels (and many demographers) have argued that mortality rates will probably decline more rapidly than the Trustees project.[3] In 2013, CBO first projected that mortality rates would improve more quickly than the Trustees projected. Specifically, CBO projected that mortality rates would improve at the average pace observed since 1950 and that the rate of improvement would be the same at all ages and for both sexes.[4] In 2016, CBO began to follow the recommendation of the 2015 technical panel and projected that mortality rates are likely to improve more quickly for younger people than for older people.[5]

Rates of Disability Incidence. CBO's current projections for disability incidence match those of the Trustees and the most recent technical panel.[6] In 2016, CBO reduced its projection of the rate of disability incidence from 5.6 per 1,000 to 5.4 per 1,000 people because recent data show that the rate has been lower than previously projected and because of the technical panel's recommendation.

3. See 2015 Technical Panel on Assumptions and Methods, *Report to the Social Security Advisory Board* (September 2015), p. 13–20, http://go.usa.gov/cJYR5 (PDF, 3.4 MB).

4. See Congressional Budget Office, *The 2013 Long-Term Budget Outlook* (September 2013), pp. 106–107, www.cbo.gov/publication/44521; and 2011 Technical Panel on Assumptions and Methods, *Report to the Social Security Advisory Board* (September 2011), pp. 55–64, http://go.usa.gov/xkd2c (PDF, 6.4 MB).

5. See Congressional Budget Office, *The 2016 Long-Term Budget Outlook* (July 2016), p. 104, www.cbo.gov/publication/51580; and 2015 Technical Panel on Assumptions and Methods, *Report to the Social Security Advisory Board* (September 2015), p. 18, http://go.usa.gov/cJYR5 (PDF, 3.4 MB).

6. See Social Security Administration, *The 2016 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds* (June 2016), pp. 134–136, www.ssa.gov/oact/tr/2016; and 2015 Technical Panel on Assumptions and Methods, *Report to the Social Security Advisory Board* (September 2015), pp. 29–44, http://go.usa.gov/cJYR5 (PDF, 3.4 MB).

Table 2.

U.S. Population by Age Group for 2014 as Projected by CBO in Various Years

Year	All Ages	Age 19 or Under	Age 20 Through 64	Age 65 or Older
		Reported Population (Millions of people)[a]		
2014	322.9	84.9	192.3	45.7
		Population Projected by CBO for 2014 (Millions of people)		
2006	323.5	85.4	194.2	43.9
2007	324.0	85.5	194.5	44.1
2008	326.9	87.0	195.5	44.4
2009	326.4	87.1	194.7	44.6
2010	326.4	87.1	194.7	44.6
2011	324.3	86.4	192.9	45.0
2012	325.2	86.3	193.5	45.4
2013	324.0	85.3	193.1	45.5
2014	324.5	85.1	193.5	45.9
		Percentage Difference Between Projected and Reported Population for 2014		
2006	0.2	0.6	1.0	-3.9
2007	0.4	0.7	1.1	-3.4
2008	1.3	2.5	1.7	-2.8
2009	1.1	2.6	1.3	-2.4
2010	1.1	2.6	1.3	-2.4
2011	0.4	1.8	0.3	-1.5
2012	0.7	1.6	0.6	-0.7
2013	0.3	0.5	0.4	-0.4
2014	0.5	0.2	0.6	0.4

Sources: Congressional Budget Office; Social Security Trustees.

CBO and the Social Security Trustees used the same population projections from 2006 through 2010. From 2011 onward, CBO's projections differed from those of the Trustees.

a. Population as of January 1, 2014.

Question: CBO has been making demographic and economic assumptions for years. Based on data from the past 10 years, please provide a table comparing your projected values for each assumption to what actually happened over that time period.

Answer: When CBO first started to publish long-term Social Security projections, it used population forecasts provided by the Social Security Trustees. More recently, CBO has made its own demographic projections—for immigration starting in 2011, mortality in 2013, and fertility in 2016. Those projections are inputs to CBO's population projections, which summarize overall demographic trends.

In 2006, both CBO and the Trustees estimated that the U.S. population in 2014 (the latest year of historical population data published by the Trustees) would be 323.5 million. That figure was 0.2 percent higher than the Trustees' most recently reported historical population for 2014 of 322.9 million people (see Table 2). In 2006, the projected population between the ages of 20 and 64 was 1.0 percent larger and the projected number of people age 65 or older was 3.9 percent smaller than the reported historical numbers for those age groups.

Table 3.

GDP for 2015 as Projected by CBO in Various Years

Year	Projected GDP for 2015 (Billions of dollars)	Percentage Difference From Actual GDP, 2015
Actual GDP, 2015	18,037	
2005	19,861	10
2006	20,178	12
2007	19,791	10
2008	19,896	10
2009	19,077	6
2010	18,621	3
2011	18,441	2
2012	17,899	-1
2013	17,913	-1
2014	18,357	2
2015	18,204	1

Source: Congressional Budget Office, using data from the Bureau of Economic Analysis.

As part of its July 2013 comprehensive revision to the national income and product accounts, the Bureau of Economic Analysis added intellectual property products to its definition of *investment*. Primarily as a result of that change, the level of nominal GDP was raised for the entire historical period. All GDP values in this table reflect the value of GDP that CBO projected for 2015 in January of each year. Values for 2005 through 2013 have not been adjusted to account for the July 2013 revision.

GDP = gross domestic product.

CBO's projection of nominal gross domestic product (GDP) is a summary measure of its economic forecast, and its long-term projections of GDP are consistent with its 10-year forecasts. (The agency regularly evaluates the quality of its 10-year economic forecasts in comparison to the economy's actual performance. The most recent such analysis was published in February 2015.)[7] In 2005, CBO published a projection of GDP for calendar year 2015 that turns out to have been about 10 percent higher than the actual amount reported by the Bureau of Economic Analysis for that year (see Table 3).[8] The difference between CBO's earlier projection and the actual figure can be traced mainly to the effects of the 2007–2009 recession and to the slower-than-average growth in the economy and inflation in the recession's aftermath.

Question: Like the Social Security Trustees, CBO publishes estimates of Social Security's 75year actuarial balance. However, unlike the Trustees, CBO does not publicly release its estimate of Social Security's 75-year open-group unfunded obligation. Why does CBO not publicly release this information? Are you able to provide this estimate? If so, please provide it for the 75-year period beginning in 2016.

7. See Congressional Budget Office, *CBO's Economic Forecasting Record: 2015 Update* (February 2015), www.cbo.gov/publication/49891.

8. See Bureau of Economic Analysis, "Current-Dollar and 'Real' Gross Domestic Product; October 28, 2016" (accessed November 15, 2016), www.bea.gov/national/xls/gdplev.xls (Excel, 46 KB).

Answer: The open-group unfunded obligation (or open-group liability) is the difference between the present value of the program's expenditures and the sum of the present value of noninterest receipts over the next 75 years and the current balance in the combined Old-Age and Survivors Insurance and Disability Insurance Trust Funds. (A present value is a single number that expresses a flow of current and future income or payments in terms of an equivalent lump sum received or paid at a specific time.) If that amount is positive, the system has an unfunded obligation. The open-group unfunded obligation differs from the actuarial balance in that it does not include an end-of-period requirement of a reserve that equals one year of costs (which is part of the calculation for the 75-year actuarial balance). CBO's current estimate of the 75-year open-group unfunded obligation for Social Security is 1.48 percent of GDP. CBO does not typically publish its estimate of that measure because it is only slightly smaller than CBO's estimate of the actuarial deficit for the same period.

Unlike the Trustees, CBO does not report the open-group unfunded liability measure in dollars. CBO typically does not present any long-run projections either in nominal dollars or in present-value dollars because those quantities are difficult to interpret out of context. Instead, CBO reports long-term projections, including projections of Social Security, as a percentage of GDP.

Congressional Budget Office

DECEMBER 9, 2016

Answers to Questions for the Record From Ranking Member Becerra Following a Hearing by the House Ways and Means Subcommittee on Social Security on Understanding Social Security's Solvency Challenge

On September 21, 2016, the House Ways and Means Subcommittee on Social Security convened a hearing at which Keith Hall, Director of the Congressional Budget Office, testified about CBO's long-term projections (www.cbo.gov/publication/51988). After the hearing, Ranking Member Becerra submitted questions for the record. This document provides CBO's answers.

Question: Please describe the model or approach the Congressional Budget Office (CBO) uses for making long-range projections, and what you know of the model and approach used by the Office of the Chief Actuary of the Social Security Administration, comparing and contrasting the relative strengths and weaknesses of each approach.

Answer: The Congressional Budget Office's long-term projections for Social Security spending and revenues are based on a detailed microsimulation model that starts with data about individuals from a representative sample of the population and projects demographic and economic outcomes for that sample through time.[1] For each person in the sample, the model simulates fertility, death, immigration and emigration, marital status and changes to it, labor force participation, hours worked, earnings, and payroll taxes, along with Social Security retirement, disability, and dependents' and survivors' benefits.

The amounts of Social Security taxes paid and benefits received, and the resulting gap between total revenues and benefits, depend on estimates of life expectancy, conditions in the labor market, and other factors. CBO's microsimulation model is designed so that, on average, the simulated economic outcomes of the sample equal the agency's long-term economic projections. Those economic projections are extensions of the 10-year economic

1. The core individual-level data used in CBO's model come from the Continuous Work History Sample, an administrative data set provided by the Social Security Administration. Those data contain a history of individual earnings records for a sample, beginning in 1951, of 1 percent of all people who have been issued Social Security numbers. The data also contain demographic information and Social Security information for each individual. The information for Old-Age, Survivors, and Disability Insurance includes claiming dates, claim type (retiree, survivor, or disability), primary insurance amount, monthly benefit amount, and the reason for disability. For more detail, see Jonathan Schwabish and Julie Topoleski, *Modeling Individual Earnings in CBO's Long-Term Microsimulation Model*, Working Paper 2013-04 (Congressional Budget Office, June 2013), www.cbo.gov/publication/44306; and Congressional Budget Office, *CBO's Long-Term Model: An Overview* (June 2009), www.cbo.gov/publication/20807.

forecasts that underlie the agency's budget projections. They reflect not just historical averages but also trends that many economic forecasters expect will continue.[2]

CBO and the Social Security Trustees use different values for the projections' four key inputs: earnings subject to Social Security's payroll tax, key components of nominal growth in gross domestic product, demographics, and real (inflation-adjusted) interest rates. However, the approaches used by CBO and the Trustees to make estimates differ in various ways even when the four major inputs are the same. In CBO's modeling, payroll taxes collected from and Social Security benefits received by a retired worker are calculated on the basis of earnings projected for that person, thus ensuring consistency in the projections of payroll taxes and benefits. The Trustees project benefits on the basis of earnings data for a recent cohort of retired-worker beneficiaries and then adjust those data to account for future earnings growth and for other projected changes in the labor market. The Trustees project payroll taxes separately.

Question: Please elaborate further on your projections regarding changes in the rate of labor force participation, and the reasoning behind the assumptions you make about the future, compared to past experience. Also, why are these rates shown in presentation without adjustment for age or sex, and what is the impact of this on your modeling and projections?

Answer: Since 2000, the rate of labor force participation has declined by 4.6 percentage points, from 67.1 percent in that year to 62.5 percent today. CBO projects a continued decline of 7.9 percentage points over the next 75 years, with labor force participation reaching 54.6 percent in 2090. The Trustees project a decline of 2.2 percentage points for the same period. With an adjustment for changes in the number of people by age and sex over time since 2016 (that is, removing the effect of the changing age-and-sex mix of the population), CBO projects that the rate of labor force participation would decline by 0.8 percentage points between today and 2090, and the Trustees project an increase in that rate of 3.2 percentage points over the same period.[3]

CBO anticipates a decline in the labor force participation rate as the population ages, especially over the next two decades. The agency also expects that some long-term trends in participation will persist for particular groups of people. Specifically, it anticipates that participation rates for younger workers and for less educated workers will continue to decline. The falling participation among those two groups is expected to have a smaller effect on overall participation, however, than is the increasing retirement of the baby-boom generation.

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2. CBO regularly compares its two- and five-year economic forecasts with those of the Office of Management and Budget and organizations in the private sector. See Congressional Budget Office, *CBO's Economic Forecasting Record: 2015 Update* (February 2015), www.cbo.gov/publication/49891.

3. In CBO's projections, the actual labor force participation rate declines by 0.8 percentage points and the rate of potential labor force participation declines by 1.6 percentage points. *Potential labor force participation* measures the number of people who would be in the labor force if the economy was at a condition of full employment. The adjustment made by the Social Security Administration in "Labor Force Participation Rates, Age-Sex-Adjusted to 2011 Population," an exhibit in that agency's testimony, accounts for the effect of the changing age-and-sex mix of the population since 2011. CBO's data account for changes in the age-and-sex mix of the population since 2016. See the testimony of Stephen C. Goss, Chief Actuary, Social Security Administration, before the Subcommittee on Social Security of the House Committee on Ways and Means, *Social Security's Solvency Challenge: Estimates for the Annual Trustees Reports and by CBO, 2002 through 2016* (September 21, 2016), p. 15, www.ssa.gov/oact/testimony/.

The reductions in participation will be modestly offset by a pair of trends working in the opposite direction. First, increasing longevity will lead people to work longer: In the coming decades, the average person is likely to work about three months longer for each additional year of life expectancy. Second, the population is becoming more educated, and workers with more education tend to stay in the labor force longer than do people with less education. CBO expects the rate of labor force participation for older workers to increase modestly.

CBO's projections of labor force participation vary by age and sex. (That variation is based on observed differences in participation according to those categories.) The overall labor force participation rate can be presented as a gross rate, which shows the effects of changing demographics over time.[4] Alternatively, that rate can be adjusted to remove the effects of the changing age-and-sex composition of the population. In both cases, the projections vary by age and sex; only the presentation of the overall rate varies. CBO's projections of Social Security's finances incorporate projections of labor force participation—including variations over time for different groups—and they account for the implications of participation for any individual person's eligibility for Social Security benefits and the amounts that person would receive in benefits.

Question: Please elaborate further on your projections regarding the rate of increases in income inequality, and the rationale for the assumptions you make about the future, compared to past experience.

Answer: Although the share of earnings for workers in the top percentile of the income distribution rose steadily in the 1980s and 1990s, it has fluctuated since then with conditions in the economy. The share fell during the recession that began in 2007 and has not returned to its prerecession level. In CBO's view, the data for the period from 2008 through 2014 about the top 1 percent of the income distribution are probably not informative about long-term trends because the 2007–2009 recession was unusually severe, especially for people with high income, and the subsequent recovery was unusually slow. It also is likely that many of those people shifted earnings from 2013 into 2012 to avoid the increases in tax rates that took effect in 2013. The earnings share of the top 1 percent rose in 2014, although it remained below the longer-term trend. CBO attributes some of that weakness to the fact that the economy was still operating appreciably below its potential in 2014.

For its projections of earnings shares over the coming decade, CBO relies on its review of longer-term trends. Specifically, the agency expects that the earnings share of the top 1 percent will rise, reaching the level suggested by extrapolation of the trend from 1978 to 2008 over the next few years and then following that trend for the remainder of the coming decade.

A smaller amount of the historical change in the income distribution has been caused by an increase in the share of earnings for workers in the 96th to 99th percentiles of the earnings distribution. Their earnings share has grown steadily—by about one-half of one percent per decade—since the late 1970s, when the relevant data began to be collected. That trend, which CBO projects will continue for the next 10 years, is expected to contribute to the changing of the income distribution over the same period.

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4. See the testimony of Keith Hall, Director, Congressional Budget Office, before the Subcommittee on Social Security of the House Committee on Ways and Means, *Comparing CBO's Long-Term Projections With Those of the Social Security Trustees* (September 21, 2016), p. 11, www.cbo.gov/publication/51988.

Question: Are there special considerations that should be taken into account when making long-term (75-year) projections as compared to making near-term projections, such as the 1, 5, or 10 years that have long been a focus for CBO?

Answer: CBO's long-term economic projections are extensions of the 10-year economic forecasts that underlie the agency's budget projections. The economic projections for the next few years are based on forecasts of cyclical developments, whereas projections for the final 5 years of a 10-year economic forecast are based primarily on projections of underlying trends in key variables along with federal tax and spending policies. For the period beyond a 10-year forecast, CBO projects economic and demographic conditions according to its assessment of long-term trends, which reflect not just historical averages but also trends that many economic forecasters expect will continue.

Budget projections are inherently uncertain, and that uncertainty increases as the analysis period lengthens. Even if laws did not change, the economy, demographics, and other factors would undoubtedly differ from CBO's projections, as would budgetary outcomes. Those differences could be within the ranges of experience observed in the relevant historical data—which, for the factors that CBO analyzes, cover roughly the past 50 to 70 years—or they might depart from historical experience. Moreover, significant budgetary effects could result from channels that CBO has not attempted to quantify in its analysis.

Question: Please discuss the notion of making incremental changes in assumptions from year to year, and how you approach whether and to what extent your assumptions should reflect recently-observed changes in economic and demographic behavior.

Answer: CBO produces independent and impartial analyses of budgetary and economic issues and considers it a priority to ensure that the agency's current-law budgetary and economic projections reflect the middle of the distribution of possible outcomes. The agency reviews historical data, the forecasts of other government agencies, and the academic literature, and it consults with its panels of advisers and other experts as it develops its projections.

CBO strives to update its projections as new information becomes available, which often requires the agency to exercise judgment about the extent to which that new information represents a change that is temporary or permanent. Such updates sometimes can lead to substantial changes from one year to the next, but CBO believes its approach provides the Congress with projections that incorporate the most current thinking. When the agency decides that relatively large revisions are warranted by new information and analysis, it explains the basis of those revisions.

For example, in 2016, CBO lowered its projection of the total fertility rate from 2.0 to 1.9 children per woman. (That rate is the average number of children that a woman would have in her lifetime if, at each age of her life, she experienced the birthrate observed or assumed for that year and if she survived her entire childbearing period.) Because historical data indicate that fertility rates often decline during recessions and rebound during recoveries, CBO did not immediately change its projection in response to the lower total fertility rates that resulted from the 2007–2009 recession. However, the U.S. fertility rate (which was 2.1 in 2007) dropped after that recession, and it has remained below 1.9 since then. For that reason—along with evidence that women are delaying childbearing to later ages—CBO lowered its projection this year.

Question: What is the oversight structure regarding your projections—what other entities review or have input into the development of the assumptions, the methods, and the results produced by the staff working on the projections?

Answer: CBO routinely consults panels of advisers that provide advice and feedback on CBO's macroeconomic forecasts and modeling of health-related programs. The agency also consults the reports of the Social Security Advisory Board's Technical Panels on Assumptions and Methods. CBO's analysts attend panel meetings and review reports, and CBO has incorporated various recommendations of those panels and used some of the Trustees' projections in its analyses. The agency also asks outside experts to comment on the assumptions and methods underlying its projections.

CBO updates its projections annually to incorporate the best information available from the research community along with feedback on the agency's analytical approach and other improvements in modeling. The projections are reviewed internally for analytical soundness in a process that involves many staff members throughout the agency. Before publication, CBO's long-term projections are subjected to rigorous internal fact-checking.

Submissions for the Record

Comments for the Record
United States House of Representatives
Committee on Ways and Means
Social Security Subcommittee
Hearing on Understanding Social Security's Solvency Challenge

Wednesday, September 21, 2016, 10:00 AM

By Michael G. Bindner
Center for Fiscal Equity

Chairman Johnson and Ranking Member Becerra, thank you for the opportunity to submit my comments on this topic. I will leave it to the Administration and CBO's witnesses to explain the difference between the future projections, except to say that both forecasts are required to be conservative. As the Economic Policy Institute found many years ago when attempts were being made to justify personal accounts in Social Security, there is truly no solvency problem if more realistic estimates are used. Of course, that relates to the system as a whole, not on how the Trust Fund is to be reimbursed, as I reiterate below. As usual, our comments are based on our four-part tax reform plan, which is as follows:

- A Value Added Tax (VAT) to fund domestic military spending and domestic discretionary spending with a rate between 10% and 13%, which makes sure very American pays something.
- Personal income surtaxes on joint and widowed filers with net annual incomes of $100,000 and single filers earning $50,000 per year to fund net interest payments, debt retirement and overseas and strategic military spending and other international spending, with graduated rates between 5% and 25% in either 5% or 10% increments. Heirs would also pay taxes on distributions from estates, but not the assets themselves, with distributions from sales to a qualified ESOP continuing to be exempt.
- Employee contributions to Old Age and Survivors Insurance (OASI) with a lower income cap, which allows for lower payment levels to wealthier retirees without making bend points more progressive.
- A VAT-like Net Business Receipts Tax (NBRT), essentially a subtraction VAT with additional tax expenditures for family support, health care and the private delivery of governmental services, to fund entitlement spending and replace income tax filing for most people (including people who file without paying), the corporate income tax, business tax filing through individual income taxes and the employer contribution to OASI, all payroll taxes for hospital insurance, disability insurance, unemployment insurance and survivors under age sixty.

Lessons from the Great Recession

The 2008 Recession triggered by our continuing asset-based Depression has both temporary and permanent effects on the trust fund's cash flow. The temporary effect was a decline in revenue caused by a slower economy and the temporary cut in payroll tax rates to provide stimulus that has since been

repealed, although the amount was added to the Trust Fund for later withdrawal, regardless of contributions not made.

The permanent effect is the early retirement of many who had planned to work longer, but because of the recent recession and slow recovery, this cohort has decided to leave the labor force for good when their extended unemployment ran out. This cohort is the older 77ers and 99ers who needed some kind of income to survive. The combination of age discrimination and the ability to retire has led them to the decision to retire before they had planned to do so, which impacts the cash flow of the trust fund, but not the overall payout (as lower benefit levels offset the impact of the decision to retire early on their total retirement cost to the system). In addition, it has been made easier for workers over 50 to retire on disability (as I have done), with many of us approved on the first try.

The Reagan-Pepper Compromise

When Social Security was saved in the early 1980s, payroll taxes were increased to build up a Trust Fund for the retirement of the Baby Boom generation. The building of this allowed the government to use these revenues to finance current operations, allowing the President and his allies in Congress to honor their commitment to preserving the last increment of his signature tax cut.

This trust fund is now coming due, so it is entirely appropriate to rely on increased income tax revenue to redeem them. It would be entirely inappropriate to renege on these promises by further extending the retirement age, cutting promised Medicare benefits or by enacting an across the board increase to the OASI payroll tax as a way to subsidize current spending or tax cuts.

The cash flow problem currently experienced by the trust fund is not the trust fund's problem, but a problem for the Treasury to address, either through further borrowing – which will require continued comity on renewing the debt limit – or the preferable solution, which higher taxes for those who received the lion's share of the benefit's from the tax cuts of 1981, 1986, 2001, 2003 and 2010. Many also complain that this recovery is anemic. That is likely because too many upper-middle income taxpayers were given a permanent tax cut from 2001. Less savings and more taxation would boost spending on both transfer payments and government purchases – especially transfers to the retired and disabled.

The cost of delaying actions to address Social Security's fiscal challenges for workers and beneficiaries.

Actions should be taken as soon as possible, especially when they must be phased in, as it is a truism that a little action early will have a larger impact later.

This should not be done, however, as an excuse to use regressive Old Age and Survivors Insurance payroll taxes to subsidize continued tax cuts on the top 20% of wage earners who pay the majority of income taxes. Retirement on Social Security for those at the lowest levels is still inadequate. Any change to the program should, in time, allow a more comfortable standard of living in retirement.

The ultimate cause of the trust fund's long term difficulties is not financial but demographic. Thus, the solution must also be demographic – both in terms of population size and income distribution. The largest demographic problem facing Social Security and the health care entitlements, Medicare and Medicaid, is the aging of the population. In the long term, the only solution for that aging is to provide a decent income for every family through more generous tax benefits.

The free market will not provide this support without such assistance, preferring instead to hire employees as cheaply as possible. Only an explicit subsidy for family size overcomes this market failure, leading to a reverse of the aging crisis.

We propose a $1000 per month refundable child tax credit payable with wages as part of our proposal for a Net Business Receipts Tax. This will take away the disincentive to have kids a slow economy provides. Within twenty years, a larger number of children born translates into more workers, who in another decade will attain levels of productivity large enough to reverse the demographic time bomb faced by Social Security in the long term.

Such an approach is superior to proposals to enact personal savings accounts as an addition to Social Security, as such accounts implicitly rely on profits from overseas labor to fund the dividends required to fill the hole caused by the aging crisis. This approach cannot succeed, however, as newly industrialized workers always develop into consumers who demand more income, leaving less for dividends to finance American retirements. The answer must come from solving the demographic problem at home, rather than relying on development abroad.

This proposal will also reduce the need for poor families to resort to abortion services in the event of an unplanned pregnancy. Indeed, if state governments were to follow suit in increasing child tax benefits as part of coordinated tax reform, most family planning activities would be to increase, rather than prevent, pregnancy. It is my hope that this fact is not lost on the Pro-Life Community, who should score support for this plan as an essential vote in maintaining a perfect pro-life voter rating.

This is not to say that there is no room for reform in the Social Security program. Indeed, comprehensive tax reform at the very least requires calculating a new tax rate for the Old Age and Survivors Insurance program. My projection is that a 6.5% rate on net income for employees and employers (or 13% total) will collect about the same revenue as currently collected for these purposes, excluding sums paid through the proposed enhanced child tax credit. This calculation is, of course, subject to revision.

While these taxes could be merged into the net business income/revenue tax, VAT or the Fair Tax as others suggest, doing so makes it more complicated to enact personal retirement accounts. My proposal for such accounts differs from the plan offered in by either the Cato Institute or the Bush Commission (aka the President's Commission to Save Social Security).

As I wrote in the January 2003 issue of Labor and Corporate Governance, I would equalize the employer contribution based on average income rather than personal income. I would also increase or eliminate the cap on contributions. The higher the income cap is raised, the more likely it is that personal retirement accounts are necessary.

A major strength of Social Security is its income redistribution function. I suspect that much of the support for personal accounts is to subvert that function – so any proposal for such accounts must move redistribution to account accumulation by equalizing the employer contribution.

I propose directing personal account investments to employer voting stock, rather than an index funds or any fund managed by outside brokers. There are no Index Fund billionaires (except those who operate them). People become rich by owning and controlling their own companies. Additionally, keeping funds in-house is the cheapest option administratively. I suspect it is even cheaper than the Social Security system – which operates at a much lower administrative cost than any defined contribution plan in existence.

Safety is, of course, a concern with personal accounts. Rather than diversifying through investment, however, I propose diversifying through insurance. A portion of the employer stock purchased would be traded to an insurance fund holding shares from all such employers. Additionally, any personal retirement accounts shifted from employee payroll taxes or from payroll taxes from non-corporate employers would go to this fund.

The insurance fund will save as a safeguard against bad management. If a third of shares were held by the insurance fund than dissident employees holding 25.1% of the employee-held shares (16.7% of the total) could combine with the insurance fund held shares to fire management if the insurance fund agreed there was cause to do so. Such a fund would make sure no one loses money should their employer fail and would serve as a sword of Damocles' to keep management in line. This is in contrast to the Cato/ PCSSS approach, which would continue the trend of management accountable to no one. The other part of my proposal that does so is representative voting by occupation on corporate boards, with either professional or union personnel providing such representation.

The suggestions made here are much less complicated than the current mix of proposals to change bend points and make OASI more of a needs based program. If the personal account provisions are adopted, there is no need to address the question of the retirement age. Workers will retire when their dividend income is adequate to meet their retirement income needs, with or even without a separate Social Security program.

No other proposal for personal retirement accounts is appropriate. Personal accounts should not be used to develop a new income stream for investment advisors and stock traders. It should certainly not result in more "trust fund socialism" with management that is accountable to no cause but short term gain. Such management often ignores the long-term interests of American workers and leaves CEOs both over-paid and unaccountable to anyone but themselves.

Progressives should not run away from proposals to enact personal accounts. If the proposals above are used as conditions for enactment, I suspect that they won't have to. The investment sector will run away from them instead and will mobilize their constituency against them. Let us hope that by then workers become invested in the possibilities of reform.

All of the changes proposed here work more effectively if started sooner. The sooner that the income cap on contributions is increased or eliminated, the higher the stock accumulation for individuals at the higher end of the age cohort to be covered by these changes – although conceivably a firm could be allowed to opt out of FICA taxes altogether provided they made all former workers and retirees whole with the equity they would have otherwise received if they had started their careers under a reformed system. I suspect, though, that most will continue to pay contributions, with a slower phase in – especially if a slower phase in leaves current management in place.

One new wrinkle is that I would also put a floor in the employer contribution to OASI, ending the need for an EITC – the loss would be more than up by gains from an equalized employer contribution – as well as lowering the ceiling on benefits. Since there will be no cap on the employer contribution, we can put in a lower cap for the employee contribution so that benefit calculations can be lower for wealthier beneficiaries, again reducing the need for bend points.

Thank you for the opportunity to address the committee. We are, of course, available for direct testimony or to answer questions by members and staff.

Contact Sheet

Michael Bindner
Center for Fiscal Equity
14448 Parkvale Road, Suite 6
Rockville, MD 20853
301-871-1395 landline
240-810-9268 cell
No fax
fiscalequitycenter@yahoo.com

This submission is made on behalf of no clients, persons and/or organizations on whose behalf the witness appears.

House Ways and Means Subcommittee on Social Security – Hearing on Understanding Social Security's Solvency Challenge

Statement for the Record
Albert J. Downs, Economic Policy Analyst for Generation Opportunity

September 21, 2016

Chairman Johnson, Ranking Member Becerra, members of the committee, thank you for the opportunity to submit a statement regarding the topic of your hearing on Understanding Social Security's Solvency Challenge. Generation Opportunity represents Millennial activists across the country, and the single biggest threat to our personal financial futures is the federal debt crisis driven by Social Security. Many elected officials fear frank discussion of this topic for political reasons, so it is great to see this Subcommittee considering the problem seriously and taking steps towards much-needed reforms.

As discussed by witnesses and Subcommittee members, our national debt is quickly approaching $20 trillion.[1] While economists continue to debate the exact level of debt to GDP that triggers instability, there is universal understanding that somewhere beyond 60 percent lies complete economic disaster.[2] While the United States is in a unique position as the largest and most influential economy in the world, we are not immune from the laws of economics, and my generation will be faced with the consequences of present inaction.

When Social Security was created, the total cost of the program amounted to 0.3 percent[3] of the federal budget, and less than one half of one percent of national GDP[4]. Today, the program costs 24 percent[5] of all taxpayer dollars and makes up 5 percent[6] of the entire economy. This growth was inevitable, as the politically motivated design of the program has never been fundamentally changed to provide the smart and effective safety net that was intended. Payroll taxes have been raised 20 times[7] since the program was created, without significantly altering the path towards bankruptcy.

Fixing Social Security isn't about throwing more money at the problem. The source of the nation's long term fiscal health strains is not on the revenue side of the issue, but on the spending side. Social Security is the single largest federal program – in 2016 it will cost $929 billion[8], nearly one quarter of every dollar the federal government spends.

While a case can be made for raising federal revenues to efficiently fund national priorities, taking more money out of the pockets of working Americans without addressing the underlying unsustainability of Social Security will hurt the economy and only punt the problem, leading to more tax hikes in the future. Ultimately, achieving a fiscally sustainable Social Security system

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[1] *Treasury Department "Debt to the Penny"* https://www.treasurydirect.gov/govt/reports/pd/pd_debttothepenny.htm
[2] *Center for Economic and Policy Research* http://voxeu.org/debates/commentaries/there-optimal-debt-gdp-ratio
[3] Author's calculations from *Office of Management and Budget (Table 3.1)* *https://www.whitehouse.gov/omb/budget/Historicals*
[4] See citation 3
[5] See citation 3
[6] *Social Security Trustees' Report 2016* https://www.ssa.gov/OACT/TR/2016/VI_G2_OASDHI_GDP.html#200732
[7] *Tax Policy Center* http://www.taxpolicycenter.org/statistics/payroll-tax-rates
[8] *Social Security Trustees' Report 2016* https://www.ssa.gov/OACT/TR/2016/IV_A_SRest.html#382302

must be done in a way that doesn't further burden future taxpayers with increased debt. Without other serious reforms, raising the taxable cap would reduce other federal tax revenues from other sources like personal income, corporate income, and excise taxes as workers and firms will earn less because it is being taxed away. Additionally, Social Security payroll tax revenue is held in treasury bonds that add to the national debt and have to be repaid by future generations.

Members of my generation don't expect as much as a penny from Social Security by a margin of two to one.[9] While this expectation does not line up with the realities of current law – which is set to cut payouts by nearly one third in 13 years[10] – it underscores the fact that young Americans aren't counting on government support when we make savings decisions.

Studies show that Millennials are about half as likely to save nothing compared to older generations[11], with nearly four in five of us reporting to save a portion of our paychecks. Additionally, my generation starts saving an average of 13 years earlier than our parents – at age 22, compared to 35.[12] Today's young Americans are also the most likely to use financial technology to help us save[13], set specific financial goals[14], and consider savings benefits when choosing a job[15].

Social Security is on a path to bankruptcy – and may ruin the entire nation's economy along the way – because the program has strayed far away from its original intent of providing a safety net to those unable to help themselves. This universal entitlement system must be modernized and right-sized if we are to avoid economic disaster and Millennials are prepared to shoulder the transition, but action must be taken soon. The longer reforms are delayed, the less likely will it be to hold harmless current recipients and those nearing collection age.

On behalf of tens of thousands of activists and many more Millennials across the country, I implore members of this subcommittee to work with your colleagues in a bipartisan way to prevent our growing federal debt from destroying the future of my generation. Saving for our own retirement is well within our control, but the fate of the federal budget is squarely in yours.

Chairman Johnson, I thank you again for the opportunity to offer comments on this matter.

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[9] *Gallup research polling* http://www.gallup.com/poll/184580/americans-doubt-social-security-benefits.aspx
[10] *Congressional Budget Office* https://www.cbo.gov/publication/51047
[11] *Financial Security Index* http://www.bankrate.com/finance/consumer-index/millennials-boost-savings-but-financial-security-slips.aspx
[12] *TransAmerica Center for Retirement Studies* https://www.transamericacenter.org/docs/default-source/resources/center-research/tcrs2014_sr_three_unique_generations.pdf
[13] See citation 12
[14] *Northwestern Mutual Planning & Progress Study* https://www.northwesternmutual.com/news-room/122886
[15] See citation 12