Testimony to the Senate Committee on Finance
“The Foreseen Trend in the Cost of Disability Insurance Benefits”

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Chairman Wyden, Ranking Member Hatch, and members of the committee, thank you very much for the invitation to speak to you today on this very important subject. We are all focused on the actuarial status of the Social Security Disability Insurance program, because the reserves are projected to become depleted late in 2016. Without legislative action, benefits scheduled in the law will not be payable in full on a timely basis once these reserves are depleted. Therefore, I will present to you today the reasons, which we have long anticipated and understood, for the recent rise in DI cost and the shortfall we face.

Background

Many analysts have raised questions about the “sustainability” of the recent period of rapid growth in the numbers of DI beneficiaries and the cost of their benefits. I am glad to report that this period of rapid growth: (1) was foreseen, (2) can be explained, and (3) is now at its predicted end.

The figure below shows that the cost of DI benefits declined from just under 0.6 percent of GDP in 1980 to just over 0.4 percent of GDP in 1990, and then increased to nearly 0.9 percent of GDP by 2010. These changes are almost entirely explained by changes in the population and the economy.

![DI Cost and Income as Percent of GDP 1975-2090](image)
Between 1970 and 1990, there was a dramatic change in the age distribution of the working-age population, as the baby boomers (born 1946-1965) entered young adulthood. This caused employment and GDP to rise much more than DI cost, as the baby boomers were still under age 45 by 1990. However, from 1990 to 2010 the baby boomers moved from young adults under age 45 to older working ages 45-64. Because they were replaced at younger adult ages by low-birth-rate generations born after 1965, the share of working-age adults who were in disability-prone ages (45-64) grew rapidly from 1990 to 2010. The great recession of 2008 resulted in lower GDP, making DI cost relative to GDP rise even more by 2010. After our economy fully recovers, we project DI cost will stabilize at just under 0.8 percent of GDP.

Over the next 20 years, through about 2035, the share of the working age population that is aged 45-64 (disability-prone ages) will shrink rapidly, putting a halt to the rise in DI cost. This population shift has also been foreseen for decades.

The rise in DI cost as percent of GDP between 1990 and 2010, due to the aging of the baby boomers and the lower birth rates following them, is a prelude to the increase in retirement cost our society faces over the next 20 years. The drop in birth rates after 1965 makes the rising retirement cost as a percent of GDP just as predictable as the rise in disability cost. What is most important to note about these changes in the population is that they are permanent shifts in the age distribution that are now complete for DI and will be complete in 20 years for OASI.

In the 1995 Trustees Report, we projected that the cost of DI benefits would rise from 0.6 percent of GDP in 1995 to 0.9 percent by 2025. Since 1995, historical GDP has been revised upward (by 5 percent for 1994 for example). Adjusting for this change in estimated GDP since 1995 through the levels estimated for 2013, we see the 1995 Trustees Report projected DI cost represents 0.85 percent of GDP by 2025. Except for the effects of the unanticipated recession
that started in 2008 (with full recovery expected by about 2020), actual DI cost as a percent of GDP has been and is now projected to be lower than expected in 1995.

The implications of past economic cycles and various changes in the law on DI cost can be seen by their effects on disabled worker “incidence rates,” which are the percent of insured workers who become newly disabled in a year. The figure below compares the incidence rate (adjusted for changes in the age distribution of the population) to the civilian unemployment rate.

Economic cycles and policy changes fluctuate, and DI incidence rates also vary
During recessions, applications for DI benefits rise, but the percent of applications that are approved for benefits generally declines because the standard for qualifying for DI benefits is based on the ability to do work that exists in the economy, whether or not job openings are plentiful at the time. The figure below shows how initial allowance rates by the state Disability Determination Services (DDS), and total allowance rates, including those allowed at appeal, respond to increases and decreases in disability applications (claims) as unemployment rises and falls. Allowance rates change counter to the civilian unemployment rate with about a 2-year lag, as many applicants do not apply immediately following job loss while they are seeking employment or receiving unemployment compensation.

The effect of the recent recession is particularly noteworthy because it illustrates that the change in DI cost as percent of GDP in an economic downturn is affected far more by a drop in GDP than by a rise in DI cost. Compared to our projections in the 2008 Trustees Report where no recession was anticipated, DI cost turned out to be less than 3 percent above the level expected, but GDP turned out to be more than 10 percent lower than expected.
The difference between the unanticipated reduction in employment and the increase in DI beneficiaries is even more dramatic. For 2010, the number of workers with earnings in covered employment was more than 10 million lower than projected in the 2008 Trustees Report. On the other hand, the increase in the number of disabled worker beneficiaries was only about 0.3 million more than projected.
Over longer periods, however, the unanticipated effects of specific economic cycles tend to offset one another. In 1995, the Trustees projected that the DI Trust Fund reserves would deplete in 2016. The figure below shows that this projection was quite accurate, even though the Trustees anticipated neither the period of extraordinary and unsustainable economic growth and the positive trust fund buildup experienced between 1995 and 2005, nor the recession of 2008, which essentially offset the positive effects between 1995 and 2005.

Why Did the Number of Disabled Worker Beneficiaries Increase from 1980 to 2010?

The change in DI cost is closely related to changes in the numbers of disabled worker beneficiaries. This makes sense because average benefit levels are designed to roughly keep pace with the average wage level, but have actually fallen short of that. Between 1980 and 2010, the total annual DI benefit cost per disabled worker rose from $5,445 to $15,139, an increase of roughly 3.5 percent per year on average. During the same period, the national average wage index (AWI) grew substantially faster at an average rate of 4.1 percent per year.

Between 1980 and 2010, the number of disabled worker beneficiaries nearly tripled from 2.9 million to 8.2 million worker beneficiaries. This 187 percent increase is explainable largely by the overall growth in the working age population (disabled worker benefits are payable only until the normal retirement age, now 66), the change in the age distribution of this population, changes in employment, insured status and disability incidence rates for women, and the recent severe recession.
The increase in the percent of working age women who have worked consistently enough to be disability insured is remarkable, nearly doubling since 1970.
In addition, disability incidence rates increased for women, as their likelihood of being insured increased. Incidence rates are now close to the level experienced for men.

Considerable attention has been focused on disability adjudication standards. Many have raised questions about the distribution of newly entitled disabled workers by impairment diagnosis. This is a particularly important question for women who have experienced such large increases in the likelihood of being insured and the likelihood of becoming disabled. We have looked at the historical trend in this distribution by age group.

For younger women, the distribution has stayed remarkably consistent over the past three decades. The distribution is similar for men.
For older women and men becoming newly entitled for disabled worker benefits, the distribution has also remained consistent over time with two exceptions. We show the trend for males below because the effects of the exceptions are more apparent than for women. The share of new beneficiaries with musculoskeletal impairments has increased substantially, while the share with circulatory impairments has declined. However, the combined share for these two diagnosis groups has remained about the same.

**Distribution of Male New Disabled Worker Entitlements at Ages 50-59 by Impairment**

![Distribution of Male New Disabled Worker Entitlements at Ages 50-59 by Impairment](image)

**Disabled Worker Beneficiary Prevalence Rates**

There are many ways of looking at the growth in the number of disabled worker beneficiaries. Care should be exercised in selecting which years and which concepts are most helpful in explaining change over time. In addition to changes in numbers of beneficiaries, we can look at changes in “prevalence rates.” Prevalence rates tell us the percent of the insured population that is receiving benefits currently. Care must be taken with prevalence rates as changes in the age distribution of the insured population can have a profound effect on the overall “gross” prevalence rate. This is particularly the case for gross prevalence rates between 1990 and 2010, when the working age population was getting older with the aging of the baby boomers.

Disabled worker prevalence rates can also be considered more narrowly by viewing these rates separately by gender and age groups. Of course, this approach omits from consideration the effects of increased population size, changes in the age distribution of the population, and changes in the percent of the population that is insured. Even in this specific analysis, care is required to avoid any misunderstanding of changes over time.
The figure below shows that male disabled worker prevalence rates at ages 35-39 and 50-54 increased significantly after 2007 as the recession began to reduce employment and cause some additional numbers of individuals to apply for benefits.

However, the prevalence rates increased not only because more workers applied and started to receive benefits, but also because the number of individuals who maintained disability-insured status was reduced by the recession. As seen below, the reduced employment rates in the recent recession reduced the percent of the population that has had sufficient recent earnings to maintain insured status for disability. This reduction in the number of insured individuals directly increases the prevalence rate. Therefore, increases in prevalence rates in hard economic times result not only from more individuals applying for benefits, but also from fewer workers maintaining their insured status.
Adjustments to Financing or Cost Needed Soon

Because the DI Trust Fund reserves are now projected to become depleted late in 2016, with continuing tax income sufficient to cover only 80 percent of the scheduled benefits at that time, change is needed soon. Numerous possibilities are available for adjusting revenue or benefit levels for the DI program, and for the Social Security OASDI program as a whole.

![Social Security Trust Fund Ratios](chart.png)

The projected shortfall requires that either scheduled revenues be increased by 25 percent, or cost be reduced by 20 percent, or some combination of these approaches. Because the trust finds cannot by law borrow, adjustments before reserve depletion are essential if abrupt cuts in benefits are to be avoided.

Given the immediacy of the need, one option to avoid sudden cuts in DI benefits is to enact a temporary tax-rate reallocation between the OASI and DI Trust Funds. Such reallocations have been enacted numerous times in the past, most recently in 1994 when the DI Trust Fund was just 8 months away from reserve depletion. The following figure illustrates just one possible tax rate reallocation that the Congress may consider. This approach would cause a temporary reallocation of a part of the OASI tax rate to the DI program, sufficient to equalize the expected reserve depletion dates for the two Trust Funds.
**Conclusion**

The increased cost of the DI program has been foreseen for decades, as it is largely the product of demographic changes that have been well known and understood. The 1995 Trustees Report provided ample warning that the tax rate reallocation of 1994 was only a temporary extension of the year of reserve depletion for the DI Trust Fund. We are now in need of adjustments once again to either permanently increase revenue or decrease cost for the DI program to assure scheduled benefits will be fully payable on a timely basis in the future. Due to the relatively strong status of the OASI Trust Fund, a tax rate reallocation can be enacted at relatively small cost to the OASI reserves and projected date of reserve depletion. However, even with this possibility, the overall Social Security program would still face a shortfall with reserve depletion for the combined trust funds projected for 2033. Adjustments will be needed before that time to avert sudden reductions in the amounts of benefits that are payable under the law.

The Office of the Chief Actuary at the Social Security Administration stands ready to assist in any way in developing the proposal that will eventually be enacted by the Congress to maintain the actuarial status of these funds. We have developed estimates for many proposals that would improve the actuarial status of the trust funds. Our estimates for both comprehensive proposals and individual provisions developed by members of Congress and other policy makers are available at [http://www.socialsecurity.gov/OACT/](http://www.socialsecurity.gov/OACT/).

Again, thank you very much for the opportunity to share this information with you. I am happy to answer any questions you may have.
The Honorable Ron Wyden, Chairman  
The Honorable Orrin Hatch, Ranking Member  
Senate Committee on Finance  
United States Senate  
Washington, D.C.  20510

Dear Senators Wyden and Hatch:

I appreciate greatly the opportunity to have testified to you and the members of the committee on July 24. Unfortunately, due to time limitations, it was not possible to comment on three important issues that were raised in the hearing. Chairman Wyden suggested following up on these issues, so I am sending this letter as an extension of my submitted testimony and the discussion at the hearing.

The three issues are: (1) the accuracy of projections for the Disability Insurance program in the annual Trustees Reports to Congress; (2) the prevalence of receipt of disability benefits in the U.S. versus that in some other countries, such as the Netherlands and Sweden; and (3) the nature of a statistic suggesting that 23 percent of disabled worker applicants are “marginal cases”. I hope the following information will be useful to you and the committee in further exploring the status the Disability Insurance program.

(1) Accuracy of Trustees’ Projections for Disability Insurance (DI)

In his testimony, Dr. Richard Burkhauser provided Figure 4, reproduced from work by Mary Daly in 2014. This figure shows 10-year projections of disabled worker beneficiaries per 100 workers with DI insured status from selected past Trustees Reports. The values illustrated show that the projected numbers of disabled worker beneficiaries were too low in the 1988, 1991, and 2005 Trustees Reports.

For the projections in the 1988 and 1991 Trustees Reports, it is correct that we substantially underestimated the numbers of disabled workers for years after 1990. The reason for this is straightforward and has been documented and long since corrected.

One of the main drivers of the increase in the number of disabled workers between 1990 and 2010 is the movement of the baby boom generations (born in 1946 through 1965) from under age 45 to over age 45 during this 20 year period. Unfortunately, our projection methods for the near-term (10 years) did not, prior to the 1992 Trustees Report, properly reflect this transition. As a
result, our projections of disabled workers for the 1991 Trustees Report fell substantially short of the actual experience that evolved through the year 2000.

For the 1992 Trustees Report, this shortcoming was addressed. (See page 92 and surrounding pages of the 1992 report at http://www.ssa.gov/history/reports/trust/1992/1992e.pdf.) The projected number of disabled worker beneficiaries for the year 2000 was increased by 22 percent, from 4.0 million in the 1991 Trustees Report to 4.9 million in the 1992 Trustees Report. The projected number of disabled worker beneficiaries for the year 2000 in the 1992 Trustees Report was within 3 percent of the actual number experienced for that year.

Perhaps the most obvious discrepancy Burkhauser and Daly point out is the values projected for years through 2014 in the 2005 Trustees Report, when the economic recession that started at the end of 2007 was not anticipated in the Trustees’ assumptions. The recession had the dual effects of (1) increasing the numbers of workers applying for benefits, with some being allowed on the basis of their medically determined condition; and (2) reducing the number of workers in the economy, leading to lower numbers of workers who retained disability insured status than had been projected before the recession. Note that workers can lose insured status as a result of being unemployed for a year, or even less, because workers must earn 20 out of the last 40 quarters of coverage to be disability insured. These two effects both increased the number of disabled worker beneficiaries and reduced the number of insured workers, as described in my original testimony.

I am happy to report that our current projections of the number of disabled worker beneficiaries over the next several years, just released in the 2014 Trustees Report, are reduced from the level projected in the 2013 Trustees Report. This reduction reflects lower actual levels of disability applications and allowance rates over the past year than had been assumed for the 2013 Trustees Report. With these reductions, we are now projecting the numbers of disabled worker beneficiaries to return to the levels projected in the 2008 Trustees Report (the last report before the recession was recognized) by the year 2025.

Projections into the future are inherently uncertain. We are constantly improving our methods and reviewing our assumptions with experts from all fields. At this time, we believe that our methods very well reflect the demographic patterns of aging that we will be confronted with in the future.

**Disability Prevalence in the U.S. Versus Other OECD Countries**

In Figure 6 of his testimony, Dr. Burkhauser provided a comparison of disability prevalence rates (disability beneficiaries per 1,000 workers) for the U.S. and the Netherlands from 1970 through 2009. The source of the figure is indicated as “Burkhauser and Daly 2011.” This figure shows the prevalence for the Netherlands rising dramatically through 1982, but dropping after 1992 to a level equal to that for the U.S. by 2009. This is one illustration of the success of the Netherlands in bringing disability prevalence down to a level close to what we have in the U.S.

However, in subsequent work by Burkhauser and Daly, published just this year in the IZA Journal of Labor Policy (http://www.izajlop.com/content/3/1/4), the authors provided data on
disability recipiency (prevalence as a percent of the working age population) from 1970 to 2012, for Australia, Great Britain, the Netherlands, Sweden, and the U.S. This comparison shows some reduction for Great Britain, the Netherlands, and Sweden in recent years, and increases of similar magnitude for Australia and the U.S. after 1990. The resulting prevalence rates for 2010 through 2012, however, are over 8 percent for Sweden, about 6 percent for Great Britain and the Netherlands, over 5 percent for Australia, and a comparatively low 4 percent for the U.S. (The prevalence rate for the U.S. is elevated recently by the recession. For years 2009 and 2010, the U.S. unemployment rate was at 9.5 percent, whereas the unemployment rate for the same period was just 4.0 percent in the Netherlands.)

In addition, the 2014 figure shows increases in prevalence rates for the U.S. on a “gross” basis, which does not adjust for the aging of the working age population, as the baby boom generations rose from ages 24 through 43 in 1990 to ages 45 through 64 in 2011. This shift in the age distribution of the working age population explains much of the increase in the gross prevalence rates for the U.S. between 1990 and 2010 to 2012. Regardless of how we look at the figure, the U.S. has a relatively low disability prevalence rate in comparison to the countries the authors considered.

(3) Statistic Suggesting That 23 Percent of Disabled Worker Applicants Are “Marginal”

In his testimony, Dr. Burkhauser indicates that Maestes et al., in their paper published in the American Economic Review (AER) in 2013, found that “23 percent of new applicants in 2005 were marginal cases whose admittance into the program was determined by the luck of drawing an easier rather than a stricter DDS gatekeeper.” It is critically important that we understand exactly what this statistic really represents.

Maestes et al. derived the 23-percent value by comparing the allowance rate for the single highest-allowing DDS examiner to the allowance rate for the single lowest-allowing DDS examiner in their 2005-2006 experience study. This statistic in no way implies that 23 percent of all disability applicants are somehow identifiable as “marginal cases.” Due to variation in the average severity of impairments for cases assigned to individual DDS examiners, we cannot even say that these two examiners would have a 23-percentage-point difference in their allowance rates if they were assigned identical cases. While it is clear that disability determinations are complicated and subject to some degree of judgment, this statistic does not support stating that 23 percent of applicants are marginal cases.

In pre-publication review, we recommended that the authors (Maestes et al.) clarify this statistic and provide more meaningful statistical measures of the variation in allowance rates on the basis of DDS examiner assignment. The authors did make this clarification in their final AER paper, so all should be careful with any citation of the 23-percent statistic.

Specifically, footnote 43 in the final AER paper makes clear that this 23-percent statistic is misleading. This footnote explains that “if one eliminated the top and bottom 1 percent of DDS examiners, then the marginal applicants would represent just under 11 percent…of all applicants.” Even more important, the footnote further explains that “if all applicants were reassigned to the average examiner in their DDS office, only 2 percent…of applicants would
have a new outcome.” The latter statement clarifies that random assignment of cases to different disability examiners within a DDS results in only 2 percent of the applications being decided differently than if all examiners made their decisions in exactly the same way.

Thank you for considering these observations that I did not have the opportunity to offer at the July 24 hearing. Please let me know if you have any additional questions and if there is any way I and my office can provide assistance in the future.

Sincerely,

Stephen C. Goss
Chief Actuary