Analysts have warned for decades of the dramatic expansion in federal spending that is now occurring as the baby boomers retire and join the ranks of Social Security and Medicare beneficiaries. So it should surprise no one that under reasonable assumptions the two programs’ share of the economy will grow by almost 60 percent over the next 30 years. Reforms to stem the programs’ claims on taxpayers abound and yet the problem still grows. Here we outline a solution based on the simple idea of stabilizing the rate at which the programs replace pre-retirement earnings. Figure 1 presents the degree to which Social Security and Medicare benefits replace the average annual compensation that new retirees earned while they were in the labor force. The replacement rates are for average workers in the year they reach 65. Compensation is used rather than earnings to account for the rising share of fringe benefits in workers’ pay, mainly in the form of employer provided health insurance. Also, the Medicare spending forecasts are from the 2009 Medicare Trustees Report. These forecasts were made before the passage of the Affordable Care Act and are more reflective of the programs’ anticipated costs.

While the series in the figure begin in 1970, given that Medicare did not start awarding benefits until the late 1960s, it is important to note that Social Security’s replacement of compensation during the program’s early years was less than 20 percent but rose to about 30 percent by 1970. From 1970 to 1981 it grew rapidly to almost 50 percent, but then after a revision of the benefit formula it stabilized at about 35 percent, the current level. As a percentage of earnings it remains stable in future years, but because we are benchmarking annual benefits relative to workers’ average annual compensation, it will decline in future years due to growth in the health care component of workers’ pay. Medicare’s replacement rate grew rapidly between 1970 and today, from about 8 percent to 34 percent and by 2024 it will match the Social Security replacement rate and by mid-century it will approach 40 percent. Since the 1980s the combined programs have provided a growing replacement rate of pre-retirement compensation driven by the growth in Medicare benefits. And as illustrated below, if Medicare’s growth continues as it has in the past, future beneficiaries will enjoy even higher replacement rates.
The combination of benefit growth when times were good and reticence concerning raising taxes left Social Security and Medicare poised for the present spending crisis. Ironically, the factor that made increased benefits possible throughout the 1960s and 1970s, the influx of baby boomers into the work force, is also responsible for the current crisis.

The baby boom generation entered the labor force in a major way in the 1960s, increasing the worker to retiree ratio. This population surge was the reason cited by the Nobel Laureate in economics, Paul Samuelson, in his now famous 1967 *Newsweek* column that Social Security is a Ponzi scheme that works. He understood that the rate of return in a generation transfer system was the rate of population growth plus the rate of growth in per-capita income, and the baby boomers were responsible for pushing that rate of return to unprecedented levels. But Samuelson ignored the adage that “what goes up must come down.”

As the baby boomers passed through their working years they provided tax revenues to fund replacement rates almost double those when Social Security began and to finance a rapidly expanding Medicare program. But what will happen as the baby boom generation transitions to the “Grey Wave” generation?

The first consequence of this transition is a reduction in the number of workers available to support each beneficiary. Figure 2 shows the past and projected path of the worker to beneficiary ratio, a measure of the availability of taxpayers to support the Social Security and Medicare payments to the retired population. The figure clearly shows the effect of the baby boom in stabilizing taxpayer availability to support the elderly population. The number of workers per beneficiary was stable at about 3.2 for the thirty-five years from 1975 to 2010. But all this will change as the baby boomers transition from benefactors to beneficiaries of the programs. The next 25 years will see a 30 percent drop in the number of workers available to pay for each retiree.

The combination of a drop in the number of workers available to pay for each retiree’s consumption and the projected increase in the replacement rate depicted in Figure 1, implies a growing tax burden on future workers. From Figure 1, workers retiring in 2030 would receive annual benefits that exceed 60 percent of their compensation, while from Figure 2 there would only be 2.1 workers to provide these benefits. Further, 2040 retirees are scheduled to receive benefits equaling 66 percent of compensation, all due to projected Medicare benefit growth. Clearly, such benefit levels will be expensive to finance with two workers supporting each retiree, and it is also clear that Medicare is the problem.

Thus, the question is, what can be done to stop the spiraling taxpayer cost of Medicare? As we have become richer and longer lived, health care consumption is substituting for other consumption. So whatever we do to solve the Medicare financing problem we do not want to take away or impede the

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**Figure 2. Workers Per Social Security Beneficiary**

![Graph showing the past and projected path of the worker to beneficiary ratio](image-url)
development of new health care solutions to problems arising from aging. That said, however, it is also important that we do something and quickly. Most beltway reform proposals wait at least a decade to even begin to change the status quo. But if we do this we have lost the Medicare battle.

We suggest a solution designed to stabilize the total compensation replacement rate provided by elderly entitlements. As we saw in Figure 1, the Social Security replacement rate is projected to decline slightly in the long run while Medicare’s replacement rate will continue to grow indefinitely. Thus, what must change is the Medicare replacement rate, and that change must happen soon. We suggest a solution that begins almost immediately but allows everyone a choice of existing Medicare or a market-based alternative based on the premium support concept that has been a part of Medicare reform proposals for several decades. Our version of Medicare reform will retain traditional Medicare, though reformed in some significant ways, Medicare I, while introducing a second Medicare, Medicare II, in the form of a private market-based program with per capita federal contributions. Importantly, from the point of view of future deficits, the sum of federal participation in the two forms of Medicare will be subject to a total budget constraint indexed to per capita GDP growth.

This approach controls the taxpayer burden of Medicare but does imply that retirees bear a greater share of their health care consumption. While this retiree burden will grow over time, at the outset it will be at current levels which will allow future retirees to prepare for paying a greater share of their future consumption, be it health care or non-health care.

Interestingly, the two most recent Medicare Trustees Reports conclude that if the Affordable Care Act’s (ACA) provisions are fully implemented, Medicare per capita spending would grow at the same rate as per capita GDP, the budget constraint we suggest. However, both Reports also conclude that the ACA’s provisions, which are effectively price ceilings on provider payments, will not achieve their goals without causing severe losses in Medicare patients’ access to care. So, while the Medicare actuaries’ estimates of the ACA’s provisions may achieve the desired scoring of costs growing with per capita GDP, the lack of flexibility dooms the forecasts’ viability.

Constraining per capita Medicare growth to the same rate as per capita GDP produces a Social Security and Medicare replacement rate of about 55 percent of compensation in the long run. Total Medicare and Social Security spending will rise with the retirement of the baby boomers, but will then stabilize in the long run if a constant replacement rate is achieved. So, how can our proposal with essentially the same spending constraint as the ACA work while the ACA as conceived cannot? Our reform would allow retirees to purchase more insurance than the amount of their premium support payments if they choose Medicare II or to supplement Medicare’s payments if they choose Medicare I. Essentially, our reform would fix the income replacement value of Medicare for retirees at its current level, thus preserving the ability of taxpayers to support retirees.

But, does it accomplish the ultimate objective for elderly entitlements? The philosophical argument for post-retirement social insurance is focused on taking care of members who experience unanticipated bad outcomes that make them unable to maintain a reasonable lifestyle, i.e., a minimum benefit. We don’t want the elderly to live out their remaining years of life in extreme poverty. However, ever-rising replacement rates and the associated growing taxpayer burden is also not a reasonable alternative. In thinking about acceptable substitutes for Social Security and Medicare, therefore, our goal should not be to find alternatives that replace in total what has been deemed unaffordable by folks on both sides of the ideological spectrum. Instead, we should focus on identifying alternatives that achieve an acceptable level of retirement benefits while not burdening the working population with taxation levels that discourage work and therefore the long-run well being of the country in general.