

# REVISITING THE LAFFER CURVE: A CASE FOR RAISING SOCIAL SECURITY TAX RATES AND OTHER SOLUTIONS TO SYSTEMIC PROBLEMS RELATING TO SOCIAL SECURITY BENEFITS

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## ABSTRACT

This paper revisits the so called Laffer Curve and then discuss changes that can be contemplated with regard to social security program to make it more viable for the future recipients. It is argued that to make the system more secure, one must look at increasing the ratio of active workers to retired workers and not just focusing on tax rate increases.

## INTRODUCTION

The Laffer Curve is a conceptual representation of the relationship between the amount of revenue raised by taxation and all possible rates of taxation. It is used to explain the elasticity of taxable income, i.e., that the amount of taxable income that will change with changes in the rate of taxation. The Laffer Curve has been applied to theories concerning the taxation of income on both the individual and corporate levels and has been extolled, defended or even ridiculed in many publications.

We demonstrate that raising the social security tax rate could provide the basis for allowing increases to retirement benefits of such a magnitude that they would create powerful incentives to delay retirement and encourage continuing to work. Lengthening the working years of taxpayers would, then, generate more social security tax revenues into the system, which could allow for the distribution of more generous retirement benefits. The increase in the number of years that an individual works has added positive side effects, such as: increased total lifetime earnings of individuals (which could further lead to an enhancement to gross domestic production (GDP)), increased income tax revenues, or allowing a reduction in income tax rates; medicare tax revenues also could be enhanced by the increase in total lifetime earnings resulting in strengthening these programs.

### **The Laffer Curve: Trickle Down or Trickle Up?**

The most common error made by people when they refer to the Laffer Curve in support for their ideas on tax reform is to claim that the Curve shows that reducing tax rates leads to increased tax revenues through a trickle down process. The concept being that the reduction in tax payments allows for growth in capital formation leading to creation of jobs for new employees who will pay tax on their income and henceforth will grow the economy in a robust fashion that will ultimately overcome and exceed the lost revenues from the reduction in the tax rates.

What the Laffer Curve does indicate, in theory, is that at some level of tax rates, a **reduction** in the rate will lead to an overall increase in tax revenues. However, the Curve also indicates that at some lower

level of tax rates a **decrease** in the tax rate will lead to a further decrease in total tax revenues, but, a contrary **increase** in the tax rate will lead to an increase in total tax revenues. We will borrow a cliché from other reformers and call this a trickle up process.

The original Laffer Curve was presented as a self-evident proof that government tax revenues would be zero at tax rates of either zero or 100 percent. This base was then used to construct a dome shaped curve anchored at both these points. Proponents of tax reduction were quick to point out that the Curve shows that decreasing high tax rates would result in an overall increase to tax revenues. But, as is evident in Figure I, the other part of the Laffer Curve can equally be used as support for the idea that, for current rates lower than the apex of the curve, an increase in the tax rate would lead to an increase in total tax revenues. Obviously, the construction of the curve itself does not provide any evidence of where these rates reach the apex of the curve and the positive slope becomes negative, or vice-versa.

## **Methodology**

Rather than search for the location of various rates on the Laffer Curve, we construct a model to demonstrate that an increase in the social security tax rate could lead to an increase in overall tax revenues, as indicated as a possibility by the other less discussed side of the Curve. While providing no supportable proof of future success for the ideas presented in this paper, neither did we find any supportable proof that these ideas if implemented would fail. We leave it to the reader to criticize and reflect on the theory itself.

## **Paying for Social Security Benefits**

Perhaps no government program has been as financially successful as the social security system whose revenues, during the 75 years of its existence, have not only exceeded its expenditures but, the surplus in the Social Security Trust Fund, which is invested in US Treasuries securities, is currently more than 2.5 trillion dollars and is projected to peak at about 3.7 trillion dollars in 2022. However, at the current time many are predicting financial disaster for the program and its ultimate bankruptcy about the year 2040. As a result, reforming the social security system is currently a major political issue.

Presidential candidate, Governor Rick Perry, of Texas, has even called the social security system a **Ponzi Scheme that will eventually collapse as all Ponzi Schemes ultimately do**. However, perhaps an even more conservative politician, Senator Rand Paul from Kentucky stated that fixing the social security system so that it would be financially healthy would require only some relatively simple adjustments; the main adjustment being to increase the retirement age gradually to age 70 by 2032. Senator Paul said this would make the system financially healthy without having to increase the FICA tax rate. But, without this increase in the retirement age, Senator Paul claimed the FICA rate would have to increase to 30 percent.

In this paper, we tend to agree with the observation that increasing the normal retirement age (NRA) should be a major factor in reforming the social security system. However, we propose that introducing social changes that provide the basis for a longer productive work life would not only have a positive effect on the financial health of the social security system, but could also have positive effects on the physical and mental health of older workers, resulting in an overall reduction in healthcare costs. Additionally, our analytical models indicate that instead of having to reduce social security benefits in the future, making these positive changes could provide substantially larger social security pensions during the critical years when people are actually no longer capable of working.

## The Arithmetic of the Social Security System

Because the first recipients of social security monthly benefits were only required to pay into the social security system for no more than three years, obviously much of their benefits had to be paid for out of the social security tax revenues from the workers who came after them. Those workers, then, were promised that, when they reached retirement age, their benefits would be paid for out of the social security tax revenues from the workers who came after them. Therefore, this feature does resemble Ponzi scheme arithmetic, as characterized by Governor Perry. However, because most of the goods and services consumed by seniors are, in fact, **perishable** (in the case of food, etc.), or **exist only in the moment** (in the case of a physician care, etc.), in a physical sense, the support of the aged who are unable to care for themselves must necessarily be provided, at that later time in their life, by the generations that come after them, and out of those generations' current efforts at that time.

Regardless of all of the rhetoric about how people should save for their future senior years, it is undeniable that the goods and services that they will require must be the product of the efforts of the generations that follow them. Prior to the social security entitlement system, many seniors had to rely on the charity of their children and neighbors to provide these goods and services. In instances, where children did not care or were unable to provide food, shelter and warmth, old people actually starved or froze to death.

The passage of The Social Security Act of 1935 did not change the fact that the goods and services to be consumed by seniors would have to be provided by the following generations. But, the Act created a system of credits that allowed seniors to acquire the goods and services they needed as an entitlement for the effort they had expended when they were younger and removed the onus of having to beg for these services from the younger currently productive generations. The credits earned, rather than being in a form such as food stamps (which carry the negative stamp of charity) were to be received in dollars which were indistinguishable from dollars earned by a currently active worker. Therefore, seniors with head high could go to the merchants and acquire these necessities as members in good standing of the community.

The transfer of goods and services from active workers to retired workers now had to be accomplished by a system of taxation as opposed to a voluntary act. The following example illustrates the theory of calculating the tax rate or rates necessary to accomplish this transfer of goods and services.

In a country we will call Potato Land, assume that there are 20 people, 17 of whom are still young and able to grow potatoes, the other 3 are too old to grow potatoes, but still must be fed. In our example, potatoes are the only goods available for consumption and each person needs one potato each day, or 365 per year. Therefore, the 17 workers must grow 7,300 potatoes each year ( $20 \times 365 = 7,300$ ) or about 430 per worker. A tax rate of 15 percent on production provides for the transfer of potatoes to the seniors.

- (1)  $20 \times 365 = 7,300$ , required production, and
- (2)  $7,300 / 17 = 429.41 \sim 430$ , potatoes produced by active workers, and
- (3)  $3 \times 365 = 1,095$ , potatoes required by seniors, and

(4)  $1,095/7,300 = 0.15$ , required tax rate.

We fast forward a few years and find that technology has vastly increased the amount of potatoes that each worker can produce to about 2,433 per year. But, because the age demographics have changed there are now only 3 young workers and 17 seniors, meanwhile there are still only 365 potatoes needed for each person, young or old. If nothing else is changed, the social security tax rate will have to increase to 85 percent.

(5)  $3 \times 2,433.33 = 7,300$ , potatoes produced by active workers, and

(6)  $17 \times 365 = 6,205$ , potatoes required by seniors, and

(7)  $6,205/7,300 = 0.85$ , required tax rate.

In this scenario, nothing has really changed, that is, everyone, young and old, still has as many potatoes as they have always had, but the young workers, however, are very upset. They have watched the 15 percent social security tax rates paid by their parents increase to 85 percent for themselves. They believe their parents must have squandered the product of their productive years and passed an unduly heavy burden on to their children and grandchildren.

The problem exists because, while technology has vastly increased the production of potatoes, technology has also extended the average life expectancy. But, because the retirement age has not been increased, the production advantage of the new technology, has not allowed an increase in the consumption of potatoes by either the young or the old. Because many of the seniors are now healthy enough to continue working, everyone could gain by increasing the retirement age.

There is no question that, in our potato example, if a retired worker picked up his hoe and walked out to the potato field there would be more potatoes for everyone to consume. The question becomes one of what is the best way to get seniors to continue working more years before they retire.

Recent legislation is gradually increasing the normal retirement age from 65 to 67. For those retiring in 2011, it is currently age 66. More legislation could increase this normal retirement age to 70 or above. However, this approach has been viewed as a punitive measure rather a positive change.

There are currently incentives in the benefit payment structure for delaying retirement and disincentives for retiring early. For those currently deciding to retire at age 62, they will receive only 75 percent of the amount that they would have received if they had waited until NRA at 66. If they decide to retire later than age 66, they will receive an additional 8 percent for each year that they delay retirement, but only until age 70. Therefore, the maximum that could be received by delaying retirement is 132 percent of the normal retirement amount. Anyone deciding to continue working after age 70 receives no additional benefit.

We propose that a larger incentive for delaying retirement may be part of a solution to the financial health of the social security system. In fact, it might be possible to leave the existing benefit distribution formula intact, if the increased incentives would cause enough seniors to delay retirement to the extent that the inflow/outflow dynamics are changed positively. One clear beneficial change would be to extend the 8 percent incentives for delaying beyond age 70. Other positive changes could come

from by gradually increasing percentage for delaying retirement, for example, 8 percent between ages 66 and 70, 9 percent for ages 70 to 75, and 10 percent for 75 and above.

In our example, we would like our seniors to voluntarily delay retirement by 5 years, which we think will change the ratio of retired to workers to about 10 workers and 10 retirees. As an incentive to voluntarily do so, they are offered an equal share in all the potatoes produced, not only during their working years but also after they do eventually retire. If they accept, this would increase their share of potatoes to 1,216 per year from the current 365, as follows:

(8)  $10 \times 2,433 = 24,330$ , increased number of potatoes produced by active workers, and

(9)  $24,333 / 20 = 1,216$  equal share of potatoes for all.

The result is that everyone is better off and the tax rate drops from 85 percent to 50 percent.

(10)  $10 \times 1,216 = 12,160$ , potatoes consumed by retirees, and

(11)  $12,160 / 24,330 = .50$ , required tax rate.

There is one adjustment to our tax rate formula that we need to consider. So far we have assumed that all goods and services are perishable, or exist only in the moment, when, in fact, there are some durable goods that we produce that can and do continue useful into our retirement years. For example, a house can be built and still provide utility many years later. Therefore, the adjustment to the tax rate formula is the percentage of the senior's total consumption that these durable goods accumulated during productive years will provide. In our illustration, we will assume this is 25 percent of total consumption. Therefore, the required division of current production will be:

(12)  $24,330 = 10X + .75(10)X$ , and

(13)  $X = 1,390$ ;  $.75X = 1,043$ , and

(14)  $10 \times 1,043 = 10,430$  potatoes offered as incentive to entitlements, and

(15)  $10,430 / 24,330 = .43$ , required tax rate.

Obviously, the assumptions used here are illustrative only and have no verifiable support. But, it does appear that, to bring seniors into an equality of consumption approaching that of active workers, a rate greater than the current 12.4 percent will be necessary. And, because of the increased total production because of more workers working longer, that, after this change in the retirement age, all parties would be better off than they were before.

However, the difficult problem will be to convince the young workers that vastly increasing the benefits of the seniors will actually also increase their consumption benefits, both currently and in the future. The current political fixation on rates, instead of on what each individual is beneficially receiving, will be a monumental obstacle to overcome.

## **How Large Government Pensions Save Taxpayers Money**

When the **San Jose Mercury** reported that some retired firefighters in California were receiving six figure pensions, the message seemed to indicate, even though it was pointed out in the article that these workers had unusually long careers, that this was considered a rip off and an extraordinary additional cost to the taxpayers. However, when we actually look at the figures, it becomes evident that the firefighters, who received the larger pensions, because they worked more years before retirement, actually saved the taxpayers money based on the amount of service that they received.

Looking at the total cost of salaries and pensions for forty years of service it becomes clear that the worker who elected to work forty years before retiring saved the taxpayers \$2,000,000 in pension costs. This is hardly the picture that we get when things like this are reported by the news media. Additionally, jealousy plays an enormous role in how large pensions are viewed. It appears to be part of human nature to assume that when some government workers are receiving more than we are it must be because they are ripping off the system.

While private sector pension plans have not been included in our analysis, it would appear that these same basic economic principles should apply to private pension plans as well as public plans. However, because this model assumes that any worker that retires must be replaced by another worker, it would not apply to situations where an organization is downsizing and is using their pension system as an incentive to reduce their work force.

## SUMMARY AND CONCLUSION

In our analysis, we found that a major factor in the future financial viability of the social security retirement system, and this factor would also affect specialized pensions for government workers, is a predicted drop in the ratio of active workers to retired workers to 2 to 1 by the year 2030. Without resorting to massive tax increases, it would appear that any reform that would restore the financial health of these systems must deal with this ratio. An obvious way to increase the ratio is, of course, to have workers delay retirement until a later age. This sort of change was actually legislated at one time, when Congress increased the normal social security retirement age from 65 to 67. Rather than such mandatory action, we believe that a better approach would be to provide significant incentives to workers who voluntarily delay their retirement to a later age.

Our analysis of the existing systems indicates that significant incentives could be given to these workers and the resultant changes could provide substantial cost savings that would: (1) reduce the cost to taxpayers of providing special pensions to certain government employees in high risk occupations, such as military, police, or fire fighters, (2) reduce the cost to taxpayers of providing social security benefits to all workers in general, and (3) provide all workers the opportunity to significantly increase their retirement benefits through personal effort and wise well informed decisions.

A major hurdle that would have to be overcome, in order to implement this sort of change, is the general public's attitude toward workers, especially government workers, receiving large pensions. This attitude has such a strong base that it may be impossible to change. However, perhaps an effort on the part of government and schools might be able to educate people such that they will be able to understand and appreciate the cost savings and other financial and social benefits that could accrue from providing these incentives to workers to delay retirement.