The Elasticity of Labor Supply and the Consequences for Tax Policy

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There is an old maxim which states that good judgment comes from experience, and experience comes from poor judgment. I think something similar can be said of government policy, to wit: Good policy comes from experience, and experience comes from poor policy.

This bit of homespun wisdom could easily apply to all sorts of government policies over time, but it has particular relevance to tax policy and, specifically, to the U.S. Social Security system. Created during the Great Depression to guarantee that no senior citizen should live in poverty, Social Security was a good idea meant to address the growing needs of elderly Americans. However, good ideas don't always equal good policy.

Social Security was developed at a time when the number of workers paying into the system greatly outnumbered those who were receiving funds, and thus the promise made by government was easily kept. But times change while policies atrophy, and Social Security has evolved into a system that places an increasing burden on the young: The ratio of workers to Social Security beneficiaries has shifted from about 41-to-1 in the 1930s to roughly 3-to-1 today.

Young workers today are being told that their Social Security contributions—or taxes—may have to increase to support the burgeoning elderly population. Moreover, those young workers are being warned that the same benefits will not apply to them—that they will have to work longer and receive less than the folks they are now supporting. Such are government promises, especially those grounded on ill-founded policy.

Poor policies, though, need not persist. We really can learn from experience, and we should apply that experience and new knowledge to existing policies so those original good ideas—and government promises—can be made whole. Regarding tax policy, we have learned that labor supply is not inelastic and does, indeed, respond to changes in tax rates. This insight, so simple and yet so powerful, has implications for all sorts of tax policies, and one that would greatly benefit from its application is the U.S. Social Security tax system. This chapter will discuss the impact of tax rates on labor supply and the implications for U.S. tax policy. If labor supply elasticities are high, then getting tax reform wrong can have terrible economic effects. I will focus on the damage done by Social Security as a special case, but the conclusions suggest that tax reforms that broaden the base and reduce marginal rates have tremendous promise.

Labor Supply Responds to Tax Rates

Let's begin by considering a commonly held view which says that labor supply is not affected by tax rates. In other words, this idea holds that hours worked in the market will remain steady when tax rates are either raised or lowered. If you are a policymaker and you subscribe to this view, then you can confidently increase marginal tax rates as high as you like to attain the revenues you desire. Not only that, but you can move those tax rates up and down whenever you like and blithely assume that this will have no effect on output. This is what economists and policymakers used to believe; unfortunately, many still do.

However, economic theory and data have come together to prove this notion wrong, and we have many different laboratories—or countries—in which we can view live experiments. The most useful comparison is between the United States and the countries of Europe because these economies share similar traits, but the data also hold when we consider other countries.

This issue is encapsulated in one question that is currently puzzling policymakers: Why do Americans work so much more than Europeans? The answer to this question is important because it suggests policy proposals that will improve European standards of living. However, an incorrect answer will result in policies that will only exacerbate Europe's problems and could have implications for other countries that are looking for best practices.

Here is a somewhat startling fact: Based on labor-market statistics from the Organisation for Economic Co-operation and Development (OECD), Americans aged 15 to 64, on a per-person basis, work 50 percent more than do the French (Prescott 2004). Comparisons between Americans and Germans or Italians are similar. What's going on here? What can possibly account for these large differences in labor supply?

It turns out the answer is not related to cultural differences or institutional factors like unemployment benefits; rather, marginal tax rates explain virtually all of this difference. I admit that when I first conducted this analysis I was surprised by this finding, because I fully expected institutional constraints to be playing a bigger role. But this is not the case.

Let's take another look at the data. According to the OECD, from 1970 to 1974 France's labor supply exceeded that of the United States. A review of other industrialized countries shows that their labor supplies also either exceeded or were comparable to the U.S. labor supply during this period. Jump ahead two decades, and you will find that France's labor supply dropped significantly (as did others), and that some countries improved and stayed in line with the United States. Controlling for other factors, what stands out in these cross-country comparisons is that when tax rates of European countries and the United States were comparable, their labor supplies were comparable (Prescott 2004).

And this insight does not apply just to Western industrialized economies. A review of Japanese and Chilean data reveals the same result (Hayashi and Prescott 2002; Bergoeing, Kehoe, Kehoe, and Soto 2002). This is an important point because some critics of this analysis have suggested that cultural differences explain the difference between European and American labor supplies. It is suggested that the French, for example, prefer leisure more than Americans do, or, on the other side of the coin, that Americans like to work more. This is silliness.

Again, I would point to the data which show that when the French and others were taxed at rates similar to Americans, they supplied roughly the same amount of labor. Other research has shown that at the aggregate level, where idiosyncratic preference differences are averaged out, people are remarkably similar across countries. Further, a recent study has shown that Germans and Americans spend the same amount of time working, but the proportion of taxable market time versus nontaxable home work time is different (Schettkat 2003). In other words, Germans work just as much, but more of their work is not captured in the taxable market.

I would add additional data for certain countries, especially Italy, that measure nontaxable market time, or the underground economy. Many Italians, for example, aren't necessarily working any less than Americans—they simply are not being taxed for some of their labor. Indeed, the Italian government increases its measured output by nearly 25 percent to capture the output of the underground sector. Change the tax laws, and you will notice a change in behavior: People won't start working more; they will simply engage in more taxable market labor and will produce more per hour worked.

This analysis has important implications for policy—not just for Europe, but for the United States, as well. For example, much was made during the 2004 U.S. election season about whether the current administration's tax cuts were good or bad for the economy, but that misses the point. The real issue is whether it is better to tweak the economy with short-lived stimulus plans or to establish an efficient tax system with low tax rates that do not change with the political climate.

What does this mean for U.S. tax policy? It means that we should stop focusing on the recent tax cuts and, instead, start thinking about tax rates. And that means that we should roll back the 1993 tax-rate increases and reestablish those from the 1986 Tax Reform Act. Just as they did in the late 1980s, and just as they would in Europe, these lower rates would increase the labor supply, output would grow, and tax revenues would increase.

Now, might there be a small increase in debt as we move to a better tax system? Sure, but remember that the most important measure of debt is privately owned government debt as a percentage of gross national income, which has been flat over the past three years. Also, a surefire way to handle this increase in debt would be to cut expenditures. Actually, another way to handle it would be to pray to the gods for another high-tech boom. The debt would go "poof," and we'd praise whoever is president for being fiscally responsible.

Some say that the 1993 tax-rate hike was responsible for erasing this country's debt problems because it increased government revenues. This is false. The ratio of U.S. debt to gross national income continued to increase in the years following those rate hikes and did not fall until the fortuitous boom that occurred in the late 1990s. The high-tech boom meant that people worked more, output increased, incomes climbed, and tax revenues followed suit. You cannot tax your way to that sort of prosperity. Imagine the outcome of the late-1990s boom if tax rates had been lower.

And, by the way, lower tax rates are good for all taxpayers. We're barking up the wrong tree if we think that "taxing the rich" will solve all our problems. You know who these rich people are? They are often families with two professional wage-earners. If you tax that family too much, one wage-earner will drop out. That's bad not only for the income of that family but also for the output of the whole economy—and it will result in lower tax revenues.

Also, we need to get away from thinking of the rich as some sort of permanent class. Many of the individuals who show up on annual millionaire lists, for example, are people who happened to have had a good year and who may never appear on those lists again. Consider people who worked hard for many years and built a successful business that finally goes public. The big capital gain they realize that year is really compensation for the uncompensated effort they put into building the business. They should not be penalized for their vision and tenacity. If we establish rules that punish the winners, entrepreneurs will take fewer risks, and we will have less innovation, less output, and less job growth. The whole economy suffers under such a scenario—not just those few individuals who are taxed at a higher rate. And this doesn't just involve the Googles and Apples and Microsofts, but countless other companies that start small and end up making large contributions to the economy.

The important thing to remember is that the labor supply is not fixed. People, be they European or American, respond to taxes on their income. Just one more example: In 1998, Spain flattened its tax rates in similar fashion to the U.S. rate cuts of 1986, and the Spanish labor supply increased by 12 percent. In addition, Spanish tax revenues also increased by a few percent.

The bottom line is that a thorough analysis of historical data in the United States and Europe indicates that, given similar incentives, people make similar choices about labor and leisure. Free European workers from their tax bondage, and you will see an increase in gross domestic product. The same holds true for Americans.

Fixing Social Security by Fixing Tax Rates

The same also holds for the U.S. Social Security system. Remember those three young workers who have to support that one senior citizen? And remember how some policymakers want to raise taxes on those young workers, and how they also want to reduce their retirement benefits even as they work to provide more benefits to current retirees? Would such changes in tax rates and in government promises affect labor supply? Theory says yes, the statistical evidence agrees, and common sense concurs. These young workers are rational. They make labor/leisure choices on the margin, and these marginal choices add up.

So what to do? How do we move from a pay-as-you-go welfare system to a self-funding retirement system that benefits from individual profit-maximizing incentives? Again, the answer begins with the insight that labor supply is responsive to tax rates. We simply cannot keep cranking up Social Security taxes with impunity. We need to turn the present tax-and-transfer system into a bona fide individual retirement system that is in line with individual incentives.

In short, the answer is to establish a system of mandatory savings accounts for retirement. Why mandatory accounts? Because without them we will not solve the time-inconsistency problem of people undersaving and becoming a welfare burden on their families and on the taxpayers. That's exactly where we are now.

Before I describe the benefits of such accounts, let's begin by dismissing the notion that individual savings plans are somehow dangerous to U.S. citizens. Some politicians have vilified the idea of giving investment freedom to citizens, arguing that those citizens will be exposed to risks inherent in the market. But this is political scaremongering. U.S. citizens already utilize IRAs, 401(k)s, PCOs (Portable Cash Options), Keoghs, SEPs, and other investment options just fine, thank you. If some are conservative investors or managing for the short term, they direct their funds accordingly; if others are more inclined to take risks or are looking at the long run, they make appropriate decisions. Consumers already know how to invest their money—why does the government feel the need to patronize them when it comes to Social Security?

Let's stop here and revisit time inconsistency. Some may think that I am trying to have it both ways with consumers—that, on the one hand, I consider them so irrational that they have to be forced to save, yet, on the other hand, that they are rational enough to manage their own retirement accounts. But this view reveals a misunderstanding of the time-inconsistency problem. We need mandatory retirement accounts not because people are irrational, but precisely because they are *perfectly rational*—they know exactly what they are doing. If, for example, people know they will be cared for in old age—even if they don't save a nickel—then what is their incentive to save that nickel? Wouldn't it be rational to spend that nickel instead?

So, indeed, people are acting rationally when they choose not to save. We have rational people making choices based on the rules. The trick is to get the rules right. A mandatory retirement system, properly designed, would establish effective rules.

We would not be designing such a system out of whole cloth. About two dozen countries have reformed their state-run retirement programs, including Sweden, Australia, Peru, the United Kingdom, Kazakhstan, China, Croatia, and Poland. If citizens in these countries and many others can handle individual savings accounts, especially citizens in countries without a history of financial freedom, then U.S. citizens should be equally adept. At a time when the rest of the world is dropping the vestiges of state control, the United States should be leading the way and not lagging behind.

An important benefit of individual savings accounts is that they are transparent, and transparency solves many problems. For example, naysayers may point to the pension funds of such cities as San Diego and Minneapolis, which are currently struggling with underfunded pension plans. But these are pensions in which individuals have no control over their contributions and in which politicians, with the aid of accountants, can hide inadequate funding for a long period. The beauty of individual savings accounts is that each person decides how his or her money will be invested and can then monitor those investments at any time and easily make changes to react to changing investment news. (Those with Internet access can even do so on a daily basis.) Individual savings accounts are transparency in practice.

The benefits of such reform extend beyond the individual retirement accounts of U.S. citizens (although that would be reason enough for reform); they also accrue to the economy. As noted above, national savings will increase, as will participation in the labor force, both to the benefit of society. On the first point, more private assets means there will be more capital, which will have a positive impact on wages, which benefits the working people, especially the young. More capital also means the economy will have more productive assets, which also contributes to more production.

In terms of labor supply, any system that taxes people when they are young and gives it back when they are old will have a negative impact. People will simply work less. Put another way, if people are in control of their own savings, and if their retirement is funded by savings rather than transfers, they will work more because they will have more to gain. And everyone will be better off. Politicians and policymakers should be falling over themselves to accomplish these types of win-win situations.

And those policymakers need to get beyond the idea of creating only voluntary savings accounts. Voluntary accounts are not the full answer. There is nothing wrong with making a reasonable minimum level of savings mandatory. Remember that our current Social Security system is mandatory, but as it stands it is a mandatory tax that perpetuates a welfare system. It doesn't have to be this way. We should separate retirement savings from a system of welfare, and the most efficient way to do that is to turn our mandatory transfer system into a mandatory savings system. The part of the Social Security system that provides for disability and survivors insurance would not be rebuilt, just the part that provides for retirement.

Let's take a moment to discuss how such a system might look. First of all, consider the young worker under the current system. Early in life, when he is earning relatively lower wages, he is still forced to submit 5.3 percent of his wages to the care of older Americans, matched by his employer (which, of course, is really a tax on the worker's wages) for a total of 10.6 percent. At a time when that young worker could best put his resources toward human capital, like further education or a young family, or toward a mortgage or a car payment, he is forced to give up a significant portion of his relatively low wages. And again, he gets little in return for this tax, except a promise for some future return that may not even match current levels.

Now, consider a proposal that frees young workers from this tax and establishes rules to align older workers' incentives to solve the time-inconsistency problem, and it would look something like this:

- Before age 25, workers would have no mandatory government retirement program.

- Beginning at age 25, workers would contribute one-quarter of the retirement program (or roughly 3 percent, vis-à-vis the current 10.6 percent rate).

- At age 30, that rate would increase to 5.3 percent.

- At 35, the rate would equal the full 10.6 percent.

- At each step along the way, the worker would make choices about how a portion of his retirement account would be invested, much as that same worker would be making choices about his personal 401(k) or other investment options at work. (And, by the way, some companies are now forcing their employees to participate in retirement plans.)

- Upon retirement, this account would be used to provide payments over the remaining lives of the individual and spouse, if married.

This graduated move to full participation could also be achieved in a linear fashion with, say, a worker beginning at one-tenth participation in year one and then adding a tenth in subsequent years. The point here is not to present the perfect plan in all its detail, but to provide a means for rethinking our Social Security system. (Of course, some young workers will be better off than others and thus may choose to invest in other retirement programs on their own; this graduated government program would not preclude them from making other investment choices.)

Shouldn't we be worried, though, about people making bad choices with these retirement accounts and gambling all their savings on risky stocks, thereby making them wards of the state anyway? We should be no more worried about this happening than we are worried about federal workers gambling away their Thrift Plans. The reason we don't worry about federal workers playing roulette with their retirement accounts is that we don't let them—we have designed a system that allows individuals to make reasoned choices based on relatively conservative indexed options. The notion that people will be gambling away their retirement accounts on risky individual stocks is a red herring. People could make riskier choices with other investment resources; such "gambling" would simply not be an option under a rebuilt Social Security program.

The same holds true for that other red herring—that individual retirement accounts will simply line the pockets of Wall Street financial firms eager to charge exorbitant transaction fees to unsuspecting rubes. Again, we need look no further than the federal government's own Thrift Plan to see a low-fee retirement plan with conservative indexed options. Another benefit of these plans is that they allow people to manage their accounts online.

Some analysts have suggested that we cannot move from a transfer system to a savings system because current retirees will be left in the lurch. Who will pay for them if workers' money is suddenly shifted to individual savings accounts? There will indeed be a period of time, likely no more than 10 years, when narrowly defined government debt relative to gross national income will increase before decreasing. But government debt is small relative to the present value of Social Security's expected promises in excess of expected future taxes summed over all individuals who currently exist. Further, the sum of the value of government debt and the value of these promises will start declining immediately.

Under a reformed system, there will always be some individuals who, owing to disabilities or other reasons that prevent them from working, will not have sufficient savings in their old age. The solution is to include a means-tested supplement to ensure that all citizens receive a required payment—just as they do today. Nobody gets left behind under this new system, and most will move ahead. U.S. citizens deserve more than a minimum payment, and the U.S. economy deserves more than to have its savings, capital, and labor weighed down by an increasingly costly tax-and-transfer system. Reforming Social Security into a system of mandatory individual savings accounts is not as radical as it sounds. The world is moving in this direction, and U.S. citizens have been dealing with individual accounts for many years through their employers—and some of these accounts are mandatory.

Rebuild Social Security, Don't Reform It

No sooner did talk get serious about fixing Social Security than the political boo-birds went to work scaring people away from new ideas. It's rare to open a newspaper editorial page and not find someone screeching about evil policymakers and cranky politicians who are trying to destroy Social Security. Why a politician from any party would intentionally want to destroy a retirement program meant to benefit the elderly is beyond me. Such political claptrap makes me glad I'm an economist. Granted, politics is a game with its own rules and incentives, and people will rationally play by those rules for political gain, but such political role-playing certainly complicates matters, at best, and makes for bad policy, at worst.

Maybe one way to help avoid *ad hominem* attacks and political labeling would be to recast the Social Security question from one of reform to one of reconstruction. Let's not reform Social Security; let's rebuild it. In other words, if we could wipe the slate clean, what kind of retirement program would we build from scratch—today? It's one thing to snipe at new proposals, but it takes a plan to beat a plan, and I'm willing to bet that the best minds of both political parties, given such a charge, would not come up with a government retirement program as it currently exists.

We have had a lot of experience with our current Social Security system. We have had a lot of experience with other tax programs. And we have new insights into the effect of tax rates on labor supply. As that old maxim suggests, it's time we put that experience and insight to use and make good policy.

Further Reading

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