Using Taxation to Increase Average Income

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Introduction

This essay addresses the paradoxical question of whether taxation can be used to increase the average income of society. ***That is – apply a tax to the total private sector income and use that to employ more people for the government and increase the total number of people employed and also increase the average income of each worker, private or public***. Re-read the previous sentence until the concept really sinks in. What I am talking about is slicing up the economic pie and reassembling the pieces into a larger pie – sounds impossible – but it is all in how craftily one does the slicing and assembling – it is remarkably easy. This is not some weird theory – it really works as you will see. I am not presenting this because I advocate this concept – I don't. My purpose is to get you to think and check facts and numbers for yourself and explore facts and numbers craftily omitted from such presentations of how government can improve your life.

All advocates for whatever position have a strong tendency to be very crafty with the facts. They will present a number of verifiable but disconnected facts juxtaposed to paint a picture that "proves" their concept but actually is totally bogus. Unlike them, I am only going to temporarily deceive you. I will first paint a picture that proves the concept using a common method of deception. At the end I will confess my deception and warn you about falling victim to a nice sounding presentation. So read the following with a clear and open mind and ignore the fact that I am deceiving you. If I did not point this out, would you fall for the deception? That is a serious question and a major point of this essay.

The economic experiments

I am going to present several experiments all based on the simplest possible model for a private economy. My purpose in being simplistic is so anyone can perform the arithmetic I present and verify that it is correct – something I highly encourage you to do. I will make the simplistic assumption that in the United States at the time of this writing there are 100 million workers in private industry earning an average of $50,000 each for a total private sector payroll of five trillion dollars. This will be the basis for the following economic experiments. You can alter these numbers however you like to better fit reality but the concept remains the same. The important thing is the concept, not the accuracy of the numbers – do not confuse the two.

Experiment 1

The purpose of the first experiment is to illustrate numbers so simple that you can check them in your head without a calculator. I will apply a ten percent tax to income and use that to employ government workers. I am not in any way suggesting that these government employees are parasites as is often done by those critical of government hiring. Try doing without police, fire fighters, and a substantial list of other important government functions and you should realize

that at least some taxation for government employees is a necessity. But then some jobs such as second deputy liaison to the third undersecretary of miscellaneous government purchases might not rank particularly high in most people's minds – although I am sure such an employee and associated family would consider that a very important position.

A 10% tax on private sector income will bring 500 billion dollars in revenue to the government. Let us make the assumption that government employees are paid the identical average salary as occurs in the private sector – $50,000. This means that the government could hire ten million employees bringing the total number of workers, private and public, to 110 million. The average income of all of these remains at $50,000 and the total payroll is now increased to six trillion dollars. Think about it – we have used government to magnify a five trillion dollar payroll to six trillion dollars. It is all real – no funny money. Printing presses not required.

But, there is more – each of those 10 million government workers also pays a 10% tax resulting in an additional fifty billion dollars of government revenue which can be used to hire an additional one million government workers also at an average salary of $50,000. Those workers also pay a tax which can be used to hire more. Continuing this process to the end results in 111 million total employees, private and public, and a total payroll of 5.56 trillion dollars. This is simple arithmetic you can do for yourself and I encourage you to do this to fully understand the point – everyone makes and average of $50,000 but an additional 11 million people are employed. Isn't that wonderful!

The results are summarized in Table 1. I am showing the calculation the brute force way because that is the easiest way for most people to see and understand the presentation. Using mathematical series the result can be obtained in a single step but then the concept becomes hard for many people to visualize or replicate. It is important that you be able to replicate the results for only then do you really understand. Check the math and confirm that it is true before proceeding. In subsequent experiments you are going to see results using this identical math that you may not believe. So you must first convince yourself that the math is right. The math does not lie.

If you are reading this in color then the four bold italic green cells in the upper left column of Table 1 are the user inputs to the Excel spreadsheet. All of the other cells are calculated. Observe that the private sector income is simply the number of private sector jobs multiplied by the average salary. At iteration 1 you should observe that the tax revenue is simply the tax rate applied to the private sector income. That tax revenue is now income for the number of government jobs that can be created. At iteration 2 you should observe that the tax revenue is simply the tax rate applied to the gross income of the government jobs created in the previous step. That tax revenue can create more government jobs as shown. This process continues with iterations 3, 4, etc. until the numbers dwindle to zero. In the interest of space I only show the first six iterations – the spreadsheet continues for as long as it takes to approach near zero additional. In the second column you will observe a number of totals that result from finishing the iterations. The average income of all employees, private and public, is shown in a large font. For subsequent experiments I will be changing the tax rate and the average income per government employee. The private sector values will remain constant throughout all experiments.

Using Taxation to Increase Average Income

Spreadsheet to illustrate job expansion through taxation				
100,000,000	Total private sector employees			
$50,000	average income per private sector employee			
	$5,000,000,000,000	Total private sector income		
$50,000	average income per government employee			
10	% tax rate on gross earnings			
	$555,555,555,556	**Total Tax Revenue**		
	11,111,111	**Total government jobs from tax revenue**		
	111,111,111	**Total Employees, private + public**		
	$5,555,555,555,556	**Total Income, private + public**		
	$50,000	**Average Income, all employees**		
Iteration		**Government**		
Number	**Tax revenue**	**jobs created**		
1	$500,000,000,000	10,000,000		
2	$50,000,000,000	1,000,000		
3	$5,000,000,000	100,000		
4	$500,000,000	10,000		
5	$50,000,000	1,000		
6	$5,000,000	100		

Table 1: A simple example you can check in your head
(only the first six of many iterations are shown)

Note: This space left blank so that subsequent experiments and tables can be on the same page.

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Experiment 2

Let us raise the tax to a more representative 25% and see what happens. The results are shown in Table 2. The same five trillion dollar private income has now been magnified to 6.67 trillion dollars of total income and 33 million more people are employed. It should become clear that the higher the tax rate the higher the magnification factor and more and more people can enjoy the benefits. Who says taxes are bad?

Spreadsheet to illustrate job expansion through taxation				
100,000,000	Total private sector employees			
$50,000	average income per private sector employee			
	$5,000,000,000,000	Total private sector income		
$50,000	average income per government employee			
25	% tax rate on gross earnings			
	$1,666,666,666,667	**Total Tax Revenue**		
	33,333,333	**Total government jobs from tax revenue**		
	133,333,333	**Total Employees, private + public**		
	$6,666,666,666,667	**Total Income, private + public**		
	$50,000	**Average Income, all employees**		
Iteration		**Government**		
Number	**Tax revenue**	**jobs created**		
1	$1,250,000,000,000	25,000,000		
2	$312,500,000,000	6,250,000		
3	$78,125,000,000	1,562,500		
4	$19,531,250,000	390,625		
5	$4,882,812,500	97,656		
6	$1,220,703,125	24,414		

Table 2: A more realistic example
(only the first six of many iterations are shown)

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Experiment 3

At this point what has been shown is that the number of people working can be increased but the average income so far has remained constant at $50,000. Let us now add a new twist to the concept to raise average income. All we have to do is pay the government employees a higher average salary than that in the private sector. So let us raise the average salary of a government employee to $60,000. The results are shown in Table 3. Note that the average income of all employees, private and public, is now $52,174. The private sector employee with an average salary of $50,000 now has an average salary of $52,174 – that is what the numbers say – although I suspect that private sector employee might disagree. If average income is going up then it must follow that society as a whole is benefitting. This is a clear example of how government can use tax revenue to make things better. An astute observer will point out that the total number of jobs created in Experiment 3 is less than that of Experiment 2. That is a logical consequence of the higher pay. But rather than worry about that, focus on the fact that the average income for all workers is now higher – thanks to government.

Spreadsheet to illustrate job expansion through taxation				
100,000,000	Total private sector employees			
$50,000	average income per private sector employee			
	$5,000,000,000,000	Total private sector income		
$60,000	average income per government employee			
25	% tax rate on gross earnings			
	$1,666,666,666,667	**Total Tax Revenue**		
	27,777,778	**Total government jobs from tax revenue**		
	127,777,778	**Total Employees, private + public**		
	$6,666,666,666,667	**Total Income, private + public**		
	$52,174	**Average Income, all employees**		
Iteration		**Government**		
Number	**Tax revenue**	**jobs created**		
1	$1,250,000,000,000	20,833,333		
2	$312,500,000,000	5,208,333		
3	$78,125,000,000	1,302,083		
4	$19,531,250,000	325,521		
5	$4,882,812,500	81,380		
6	$1,220,703,125	20,345		

Table 3: How to increase average income
(only the first six of many iterations are shown)

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Experiment 4

Now it is time to carry this experiment to the extreme. Let us raise the tax rate to 80% – some people have suggested raising the tax rate to 90%. We encounter a practical problem – in theory the government could create 333 million jobs for a total employment of 433 million. That exceeds the population of the United States. Since as was seen in the transition from Experiment 2 to 3, as the average income of each government worker increased that fewer government employees could be hired. That is logical. So the obvious thing to do is to increase the average income of each government employee until the total number of employees is a reasonable number. It turns out that a nice round number is $800,000 per year – I am quitting private employment and going to work for the government!!! The results of this experiment are shown in Table 4. Observe that the five trillion dollar private income has been magnified to twenty-five trillion dollars and that the average income for all employees has risen to a whopping $200,000 – all from simply collecting more tax and paying government employees very well. More people are working and are enjoying a higher average income – although I suspect the private sector employees may be questioning this "benefit" that the numbers claim they enjoy. The opening question of this essay has now been strongly proven in the affirmative. Check the math. Nothing has changed from Experiment 1 which should have convinced you that the math is correct. If the math was correct for that case then the math remains correct for this case.

Spreadsheet to illustrate job expansion through taxation				
100,000,000	Total private sector employees			
$50,000	average income per private sector employee			
	$5,000,000,000,000	Total private sector income		
$800,000	average income per government employee			
80	% tax rate on gross earnings			
	$20,000,000,000,000	**Total Tax Revenue**		
	25,000,000	**Total government jobs from tax revenue**		
	125,000,000	**Total Employees, private + public**		
	$25,000,000,000,000	**Total Income, private + public**		
	$200,000	**Average Income, all employees**		
Iteration Number	**Tax revenue**	**Government jobs created**		
1	$4,000,000,000,000	5,000,000		
2	$3,200,000,000,000	4,000,000		
3	$2,560,000,000,000	3,200,000		
4	$2,048,000,000,000	2,560,000		
5	$1,638,400,000,000	2,048,000		
6	$1,310,720,000,000	1,638,400		

Table 4: A bizarre example
(only the first six of many iterations are shown)

You look at these results and they seem too fantastical to possibly be true. So then, point out the math error. If you can't find any error then wouldn't that mean the presentation is correct? Don't read any further into this piece until you have examined the above results and either have discovered a problem or you give up and can't. Don't feel bad if you are having difficulties as this is a problem that requires much more thought than most people are accustomed to putting into such a dilemma. Keep in mind that you are constantly fed via the news media all sorts of leftist (and sometimes rightist) economic concepts that sound great – like this one. Your bias is to believe without question the presentation from your leftist or rightest perspective and disregard any presentation from the opposite perspective. That is a major mistake and makes you into what I refer to in a variety of my writings as a sheeple.

The truth

I hope you figured the situation out for yourself. If so then good for you – the world needs more people like you. If you have just accepted my numbers without performing confirming arithmetic then shame on you – you trust presentations way too much – you are a gullible sheeple.

For one thing – you have just seen an example of the concept of financial multiplication by counting the same money multiple times under the guise that new wealth is being created. Be wary anytime you hear of financial multipliers. Financial multipliers are only valid if new wealth is enabled to be created. Yes, that can be done but it takes effort, i.e. investment. Only shams happen for free. It is much easier to count money multiple times and create imaginary wealth. That is what politicians are good for.

Another concept that should raise a red flag any time you hear it is <u>average</u>. That is such a common word we hear and use all the time. Provided that the data points are relatively tightly clustered then the average of that data is meaningful. However, when the data points are widely separated (as in this example and numerous economic presentations) then <u>average</u> is absolutely meaningless. One of the best illustrations I know of is to have your feet in an oven at 180 degrees and your head in a deep freeze at 0 degrees. The average temperature is 90 degrees – therefore all is well (Stanford professor, Sam Savage, coined the phrase, "*The flaw of averages*" to describe this situation – Google that phrase for some interesting discussion.). Anytime you hear averages used to represent a broad range of numbers (average income, average tax burden, etc.) then be suspicious of a bogus presentation. Averages are fine for things such as "average price of a gallon of milk", etc. as the various prices are likely to be tightly clustered.

Consider the private employee making $50,000 and paying an 80% tax thus netting only $10,000 and then a public employee making $800,000 and paying an 80% tax thus netting $160,000. But the average salary is $200,000 and the average net after taxes is $40,000 which when multiplied by the total of 125 million employees gets us back to the original five trillion dollars we started with – so no wealth was actually created by this fantastical government program – but wealth was transferred to a select group. How many private employees do you think will continue to work under this system? What happens if all private employees quit? Then there is

no money to pay the public employees and everyone goes broke. So the great economic scheme ends up failing – as you should expect.

Those that would deceive have other tricks. Another term is median as in median household income, etc. For those who understand it this term can have more significance than average when data is not tightly clustered but the typical use is as a substitute for average to make a bogus presentation sound credible. So be alert when median is used. In fact, any type of qualifier in a presentation should be interpreted as suspicious. Get used to thinking that way and you won't be misled.

Conclusion

What I have illustrated here is just one of countless ways you can be misled with facts. What I hope you learn from this is to not accept anything without detailed checking. But further, be sure you are checking the right things in order to see the entire picture, not just the facts that support a particular presentation – a trap that so many people fall into. I have studied the techniques of deception (financial and economic deceptions in particular), not because I intend to deceive anyone, but to be able to recognize the applied techniques when someone is attempting to deceive me. The general concept is to "know thy enemy." You often hear of various financial multipliers not much different from what I have presented here. Some of the information presented is in fact true and other information is totally bogus. Can you separate the truth from the bogus?

Let me leave you with a thought to explore using the identical methods of this essay. Suppose that after all truly needed government jobs are filled that instead of the government hiring more people to perform meaningless tasks that that money simply went to pay all the various forms of welfare for not working. Then, instead of computing average earnings we compute per capita income or benefit, working or not. Your challenge is to show that by taxing those who work more and by raising the welfare payout to more than those who work that the average per capita income for the nation can be significantly increased. In short, we can tax ourselves to Utopia. Isn't economics wonderful!!! As long as you are crafty in the use of averages you can get away with such. I and a number of other educated and thinking individuals will know such a presentation is bogus but we are a minority. The mass of sheeple will accept and vote for it for they are stupid and gullible.

No matter how crafty, no professional magician can fool another professional magician. Their deceptions are both harmless and quite entertaining and I am amazed at what they can do particularly when I am at a complete loss to offer any theory as to how they accomplish their feats – it is truly magic. Other types of deceptions are very harmful as they enable you to be manipulated by charlatans for your financial impediment and their financial gain. Enjoy the entertaining deceptions but be very wary of the harmful deceptions.