Unintended Consequences

Rogoff, Reinhart and Ricardian Equivalence

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The largest economics controversy of the year belonged to Ken Rogoff and Carmen Reinhart for their research describing the relationship between economic growth and government debt. Their research, based on their popular book looking at the striking similarities between recurring booms and busts, argued that there is a critical level of debt above which economic growth is compromised (Rogoff and Reinhart 2009, 2010). Loosely stated, they argued that government debt above 90 percent of a country´s GDP is harmful to economic growth.

Earlier this year this conclusion was brought into disrepute when a review article argued that Rogoff and Reinhart's study was plagued by "coding errors, selective exclusion of available data, and unconventional weighting of summary statistics lead to serious errors that inaccurately represent the relationship between public debt and GDP growth among 20 advanced economies in the post-war period" (Herndon, Ash and Pollin 2013).

In the melee that ensued there was a critical point all but lost. There *is* a relationship between debt and growth, and whether Reinhart and Rogoff massaged their numbers to get the result in question is of only secondary importance. Like all great laws in economics, the quantitative relationship is never fixed though the qualitative relationship is definitively identifiable (Mises 1962: 62-63). Just as the basic logic of a binding price floor implies that, for example, a minimum wage will cause some marginal workers to be unemployed, the same logic yields no definitive result.

No self-respecting economist would argue that a 5 percent increase in the minimum wage will decrease employment by 2 percent. By the same reasoning, it befuddles belief that otherwise respectable economists Reinhart and Rogoff would invoke the same reasoning with their 90 percent debt-to-GDP cutoff. (In their defense, this figure was less important in their work than the popular press later made it out to be.)

If Reinhart and Rogoff are guilty of anything, it is of an overly narrow analysis that ignores some important variables. In particular, the exclusive focus on the role of debt on growth, while useful within the restricted confines

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of their study, lacks practical importance when viewed in isolation.

1. What's Debt Good For?

Consider the four uses an individual has for his money: consumption, investment, taxes and debt repayment. Consumption improves a person's wellbeing in the present, and investment does so in the future. Taxes fund either government consumption or investment, with the usual problem in identifying how valued either of those activities are.[2] One fact is clear: to the extent that taxes reduce private income they hamper the ability for private individuals to use their earnings to improve their wellbeing. Debt repayment does the same. (My own article "The Quantity Theory of Money" in this issue further explores the implications of debt repayment on consumption and investment activity.)

An individual's wellbeing will be unambiguously highest when he has the largest portion of his income available to spend on consumption or investment activities. This implies that tax *and* debt minimization are both key factors. Note also that wellbeing is not just the social property of having a satisfied and content population; it also translates into higher levels of economic growth. More consumption expenditure today means that businesses must hire more employees and increase production to satisfy these demands. Increasing consumption expenditure might lead to more jobs in the present, but at the expense of the investment needed to increase the rate of economic growth in the future. Investment expenditure has a similar result, though it is aimed at satisfying consumption demands expected to prevail at some future time. The more investment expenditure we made in the present, the greater the rate of economic growth in the future (assuming all goes well, of course).

Taxes and debt repayment, to the extent that they reduce the amount of funding available for consumption and production activities, reduce economic growth and the wellbeing of society's members in the present.

Rogoff and Reinhart look at debt levels and the relationship to growth, and from this they get a crude measure of the effect of debt repayment on economic growth. I say it is a crude measure because the total level of debt is not the key factor. The amount of debt *being repaid each period* is vital, and this results from the total amount of debt scheduled for repayment and the prevailing interest rate.

However, taxes are also important and Rogoff and Reinhart largely sidestep this issue. This is not to criticize the Harvard economists, as their goal was narrowly focused on looking at the historical role of debt in times of crisis. In drawing policy conclusions, something the press was eager to tease out of their research, one needs to have a comprehensive look at the greater facts at hand.

Very few countries run high public deficits *and* levy high tax rates. The reason is, as we shall see, that it is difficult to do so and the result is often detrimental to growth. Instead, most countries treat the choice as binary: either high taxes and low deficits, or high deficits with low taxes.

One end of the spectrum might be Norway. Well known for its high tax regime, total Norwegian tax receipts totaled 42.2 percent of its economy last year. This small Scandinavian country has chosen to finance its public spending exclusively through taxes. Indeed, last year the Norwegian government ran a budget surplus of 13.9 percent of GDP thus reducing the amount of government debt outstanding. High taxes have removed the necessity for the government to finance itself through borrowing.

Take the opposite end of the spectrum. The United States is widely viewed as a low tax regime, and at 24 percent of its GDP the total tax collections from all levels of government are low relative to many of its developed counterparts. This low level of tax receipts has left the U.S. government dependent on borrowing to make up the remainder. Perhaps unsurprisingly, the United States runs one of the largest government deficits in the developed world, at 11 percent of GDP in 2012. Americans pay low taxes today for their services, but at some point in the future the bill will come due.

2. Quibbling about Ricardian Equivalence

In one sense, taxes and deficits are two sides of the same coin. Indeed, the British political economist David Ricardo first hypothesized such a relationship, only to downplay its practical relevance. In a nutshell,

2 Although even this is debatable. Murray Rothbard (2004: 938-43) argued that all government expenditure is consumption, as it results in either consumption activity via transfer payments or "waste" through investments not aligned with consumer preferences. I prefer a more reserved stance whereby any government expenditure that turns out to be investment is merely accidental.

the hypothesis that now bears his name as "Ricardian equivalence" states that since governments can either raise money through taxes or bond issuances, and that these bonds must be eventually repaid (through taxes), the choice is not binary but unique – taxes now or taxes later.

Under one strict formulation, if a government incurs a large debt today individuals will bolster their savings in the expectation of future higher taxes to pay off the debt. This increase in savings decreases consumption by a similar amount, thus having the same effect as increased taxes would.

I´m not so sure it´s as simple as that (and neither did Ricardo). The people who benefit from the deficit spending today may not live to see their taxes pay off that same debt in the future (Buchanan 1976). Perhaps most importantly, the strict interpretation of Ricardian equivalence views savings and investment as lost economic activity. Similar to how Keynes´ paradox of thrift argued that only consumption expenditure can stimulate an economy, savings are viewed as a "leakage" from the system, and a form of lost income. Yet as Hayek (1931) so succinctly put it, investment in production must come prior to consumption, and thus savings is a necessary step in enabling demand to be fulfilled.

Despite some arguments as to what degree Ricardian equivalence holds quantitatively true, there is a basic truism in its qualitative message. Spending in the present that is not directed towards consumption and investment activity – including taxes and debt repayment – are net negatives that reduce our wellbeing. In this light we can agree with Mises´ prescient analysis almost one hundred years ago: "it is fundamentally a matter of indifference whether [the government] … imposes a one-time tax on him of half his wealth or takes from him every year as a tax the amount that corresponds to interest payments on half his wealth" (Mises 1919: 168, as quoted in Garrison 2001: 89).

Consumption improves our wellbeing today, and investment is aimed at improving it in the future. At times government expenditure can take on the appearance of consumption or investment activity, though it can never be valued as highly as voluntarily activities can be. People act to relieve their most pressing needs, and only by voluntarily directing their own income can we be certain that the most dire of these needs has been fulfilled.

Income spent repaying debt, especially public debt, removes the possibility of improving our wellbeing by expenditure on consumption that would directly provide satisfaction. Kenneth Rogoff and Carmen Reinhart have done a great service in making this apparent, and showing that too much debt (and more importantly, debt repayment) compromises growth. A look at the pernicious effects of taxes in reducing our wellbeing would tell a much more complete story.

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