Chapter 2

On the Burden of Government Debt

The essence of public debt, as a financing institution, is that it allows the objective cost of currently financed expenditure projects to be postponed in time. For the taxpayer, public debt delays the necessity of transferring command over resource services to the treasury.

-James M. Buchanan, "Confessions of a Burden Monger" (1964)

In 2021 a national government decides to build a hydroelectric dam at a cost of \$25 billion. Three options are available to the government for financing this project. The government can (1) acquire the full \$25 billion through taxation today; (2) borrow the \$25 billion from willing creditors; or (3) print 25 billion new dollars. In reality, of course, the government can use some mixture of two or more of these options. But to keep the exposition straightforward, we'll here assume that no such mixing of financing options occurs.

Determining which option is best requires an assessment of a large number of considerations such as, but by no means limited to, the responsiveness of workers, businesses, and investors to higher taxes, the current relationship between the existing supply of money and the demand of people to hold part of their wealth in money, and the rate of interest. Let us assume that after weighing the merits and demerits of each option the government chooses to borrow the funds. Specifically, the government sells a \$25 billion bond to a wealthy investor. The bond pays a five percent annual interest rate. In 2051, the investor or his heirs will submit the bond to the government in return for roughly \$108 billion, which equals the \$25 billion in principal plus accumulated interest. Put in terms of this hypothetical example, the central question explored by James Buchanan in his 1958 book, *Public Principles of Public Debt*, is "Who pays for this dam?" If the mid-twentieth century consensus among economists were correct, the dam is paid for fully in 2021. That's because in that year, \$25 billion worth of real resources—land, bulldozers and other construction machinery, along with concrete and steel and wiring and other materials, and human labour—are devoted to building the dam. It is in 2021 that whatever else could have been built or done with these inputs and labour was *not* done in order that these inputs and labor could instead be devoted to the building of the dam.

This consensus by mid-twentieth century economists that debt-financed projects are paid for by citizen-taxpayers at the time the projects are undertaken rather than by future generations Buchanan called "the new orthodoxy." It was an orthodoxy because it was widely taken to be obviously true, and it was new because it sprung from Keynesian economics, which in 1958 was only 22 years old.

Until John Maynard Keynes published his *General Theory of Employment, Interest, and Money* in 1936, most economists—from Adam Smith in the mid-eighteenth century through economists in the early twentieth century understood that the costs of government projects funded with debt are passed on to the future generations who, as citizen-taxpayers, must repay the debt. This understanding was rejected by the new orthodoxy and replaced with the insistence that projects funded with borrowed money are, just like projects funded with currently collected taxes, paid for at the time the projects are undertaken.

The new orthodoxy does recognize that debt financing nevertheless leaves a legacy for future citizen-taxpayers. In the case of the hypothetical hydroelectric dam built in 2021 with borrowed funds, citizens are obliged in 2051 to repay the debt that was incurred 30 years earlier. To do so they must, in 2051, pay more in taxes or suffer cuts in government programs (or some combination of the two) to the tune of about \$108 billion. Retiring this bond might impose a net burden on citizens if the bond were owned and submitted for redemption by a non-citizen. In such a case, nationals in 2051 would, as a group, be made \$108 billion worse off, with foreigners being made \$108 billion better off. But, the new orthodoxy continues, if the bond is owned and submitted for redemption by nationals, then apart from some relatively negligible costs incurred in carrying out the process of transferring the funds from citizen-taxpayers to citizen-bondholders, redemption imposes no *net* burden on nationals. Although those citizens who pay the debt are worse off as a result of paying more in taxes or receiving less in government services, other citizens—those who receive repayment of the debt—are better off by the same amount. Just as a household is made neither richer nor poorer if a wife transfers money to her husband, a nation is made neither richer nor poorer if one group of citizens transfers money to another group of citizens.

Using the phrase that mid-1950s economists employed to describe this situation, nationals in 2051 might say, "We owe it to ourselves."

Buchanan's insight

Although he accepted the new orthodoxy early in his career, Buchanan soon rejected it once he'd studied the public-finance writings of Italian scholars. These scholars, for all the differences that sometimes separated them from each other, nearly all worked under the presumption that the state often has interests that are at odds with those of it citizens. For the Italians—unlike for the majority of public-finance scholars in English-speaking countries—the state was not seen as generally a natural and faithful extension of a unified will of the People. This "Italian" perspective reinforced Buchanan's skepticism of the organismic view of government and society, and further encouraged him to work consistently as a methodological individualist—that is, as a scholar who pays close attention to the incentives that prompt different individuals, in different capacities, to choose and act as they do.

This scientific perspective is responsible for what Buchanan remembered as being the only real flash of major, road-to-Damascus-like inspiration that ever occurred to him. In early 1957, after breakfast one morning in Rome, Buchanan suddenly "saw" the core fallacy in the new orthodoxy. He immediately turned to fleshing out his new understanding. The result is *Public Principles of Public Debt*, a slim yet thorough volume of tightly reasoned analysis.

According to Buchanan, the new orthodoxy's fatal flaw is its insistence that the costs of debt financing are incurred in the periods when the debt-financed programs are undertaken. And if this insistence is wrong, then the older, pre-Keynesian understanding is correct that programs funded with debt today are paid for by citizen-taxpayers tomorrow. Therefore, by using debt to finance government programs, we, today's citizen-taxpayers, can indeed consume at the expense of our children and grandchildren.

The old-time fiscal religion

The key insight in Buchanan's criticism of the new orthodoxy and, hence, of his revitalization of the older, classical view is the realization that creditors who lend money to the government do so voluntarily. Yes, by transferring some of today's spending power to the government, these creditors reduce their own ability to spend today. But these creditors lend to the government only because they believe that the interest payments they will receive in exchange make such loans worthwhile for them.

These creditors do not think of themselves as paying for whatever projects are funded with the borrowed money. And they are correct in that thinking. These creditors are not the purchasers of the debt-financed projects; instead, they are purchasers of future interest payments that make it worthwhile for them to sacrifice their consumption today. Thus, debt-financed government projects are not paid for by the government's creditors.

Similarly, today's citizen-taxpayers are not paying for debt-financed projects such as the hypothetic hydroelectric dam project mentioned earlier. After all, the very reason the government in 2021 borrows the funds to build the dam is to relieve today's citizen-taxpayers from having to pay for it.

Yet *someone* has to pay for the dam! Who? Buchanan's answer is that the dam is paid for by citizen-taxpayers in 2051, who are obliged to repay the debt. These individuals are the ones who must reduce their consumption or wealth from what it would be in the absence of their having to repay the debt. The debt repayment comes in the form of more taxes paid or the receipt of fewer goods and services from the government.

This shifting of the burden of paying for debt-financed projects to future citizen-taxpayers is not in the slightest affected by whether or not the bond-holders are fellow nationals or foreigners. The decisive fact is that to repay

the debt in 2051, some citizen-taxpayers that year will have to reduce their consumption or wealth.

Adherents of the new orthodoxy respond by saying that if the debt is repaid to fellow citizens, there is no net reduction in aggregate national wealth. The repayment, they maintain, is merely a transfer, as if from the left hand to the right. Buchanan, however, argued that this reasoning is mistaken. If the creditors in 2021 had not loaned \$25 billion to the government, they would have done something else with their money—something else of nearly equivalent value to lending to the government—such as, for instance, lending \$25 billion to private companies.

Buchanan assumed, not unrealistically, that credit markets are competitive. From this assumption it follows that the attractiveness to creditors of lending to the government is only marginally greater than (that is, is largely equivalent to) the attractiveness of using their money in other ways.

And so when in 2051 the government's creditors are repaid, they are made no better off (or worse off) than they would have been had they used their money differently in 2021. Repayment of the debt does not make the repaid creditors anything but marginally richer than they would have been had they instead invested their money in alternative projects. But repayment *does* make the citizen-taxpayers who foot the bill poorer by the full amount of the repayment.

Dam or ditch? Money or muscle? It doesn't matter

Buchanan's demonstration that debt financing of government projects is paid for by future citizen-taxpayers can be challenging to grasp. So here is a slightly different way to see what Buchanan was driving at.

Suppose that the government of the town of Musgrave hires 10 workers, all citizens of Musgrave, to dig a drainage ditch. It will take these workers five 10-hour workdays to finish digging the ditch. They start on Monday morning and complete the job on Friday afternoon. The government promises to pay each worker \$10 for each hour he or she works. If all workers work the entire 50 hours, each will receive a payment on Friday afternoon of \$500. The government will acquire the full \$5,000 needed to pay all 10 workers by collecting \$5,000 in tax revenues from the citizens of Musgrave on Friday afternoon.

From the time the workers start digging on Monday morning until the moment before they receive their pay on Friday afternoon, these workers extend credit to the government. In effect, by agreeing to work starting on Monday morning and not be paid until Friday afternoon, the workers lend the government their time and effort for the week. Until the government pays the workers, it is indebted to each worker for the wages that that worker has earned.

But clearly it isn't the workers who pay for the drainage ditch. They correctly don't think of themselves as purchasing the ditch, and no one else thinks of them as doing so either. This is so despite the fact that the workers have loaned the government real resources—500 hours of their work effort— before being paid. The people who pay for the ditch are the citizens whose taxes are raised in order for the government to obtain the \$5,000 that it then pays to the workers.

In this example it's clear that the drainage ditch is paid for by citizen-taxpayers rather than by the workers who loaned resources to the government during the (brief) time government borrowed the resources it consumed to carry out the project. Just because none of the workers are paid at the end of, say, Monday's digging, no one would conclude that the responsibility for paying for the portion of the ditch that was dug on Monday is not shifted ahead to the citizen-taxpayers whose taxes are raised on Friday afternoon.

And on Friday afternoon when Musgrave's citizens' taxes are raised, these citizens, as a group, are out \$5,000 worth of spending power that they would otherwise not be out were their taxes not raised. Furthermore, it's also clear that once the workers receive this \$5,000, even though it is a transfer of \$5,000 from some citizens of Musgrave to other citizens of Musgrave, that does not mean that the drainage ditch cost Musgrave nothing. Obviously, it cost Musgrave \$5,000. (More precisely, the ditch cost the citizens of Musgrave whatever else they would have purchased with the \$5,000 had they not had to pay for the ditch.)

Buchanan's key insight applied here is that the workers hired to dig the ditch were hired at the going wage rate—\$10 an hour in this example—and had the government not hired the workers to dig the ditch, each worker would have been employed in some other productive job. Whatever work they did to earn the money, each worker's weekly income would have been \$500. So when

these workers receive \$5,000 as payment from the government's treasury, their receipt of this income does not offset the loss of the \$5,000 in taxes paid on Friday afternoon by Musgrave's citizens.

Wasteful or productive?

Note that Buchanan's argument that each debt-financed project is paid for by the future citizen-taxpayers who must service the debt holds regardless of whether the project is wasteful or productive. We might agree that our hypothetical hydroelectric dam built with borrowed funds is an unambiguously excellent use of resources, one that yields enormous benefits for many future generations. But even productive projects are not free; someone must pay for them. And because the construction of the dam is financed with borrowed funds, those who will pay for it are future citizen-taxpayers. Those future citizens might unanimously agree that the value they receive from the dam is worth the price they are obliged to pay for it, but they, and only they, must nevertheless still pay for it.

Buchanan's argument should not, therefore, be interpreted as counselling against any and all debt financing. He explicitly recognized that it is appropriate to finance some projects with debt rather than with current taxation. Projects that yield benefits to future citizen-taxpayers are appropriately paid for by those future taxpayers rather than by current taxpayers who derive no benefits from such projects. In such cases, debt financing is a vehicle for handing the bill to those who will receive the benefits.

But precisely because debt financing is a means of presenting the bill for projects undertaken today to future generations, the availability of the debt-financing option gives to today's taxpayers the opportunity to consume at the expense of tomorrow's taxpayers. We correctly understand that if Jones is given the ability to spend money belonging to stranger Smith, the likelihood is high that Jones will spend excessively. This understanding holds firm regardless of whether Smith is Jones's contemporary or is not yet born when Jones is spending his money.

This ability of current taxpayers to use debt financing to free-ride on the wealth of future generations led Buchanan to worry that government today will both spend excessively and fund too many projects with debt. Tomorrow's citizen-taxpayers, after all, are not today's voters. Thus, the interests of these future generations are under-represented in the political process.

To reduce the magnitude of this problem, Buchanan endorsed constitutional rules that oblige governments to annually keep their budgets in balance. His fear that the opportunity for debt financing of government projects and programs would be abused was so acute that it led him to endorse a balanced-budget amendment to the US Constitution. His participation in a political effort to secure such an amendment is one of the very few specific, ground-level policy battles that he actively joined. We will see in Chapter 9 the logic of Buchanan's argument in support of constitutional rules.