## To understand the ricardian equivalence view



In order to understand the Ricardian equivalence view, suppose that government cut taxes today, and don't make any plans to decrease government purchases today or in future. According to conventional view this type of policy will increase consumption, decrease national saving and capital accumulation, which in turn lower long term economic growth. The argument of Ricardian equivalence by contrast states that there will be no alteration in consumption, capital accumulation and growth. The situation of economy with budget deficit and tax cut is same to situation without it.

The Ricardian equivalence argument states that budget deficit and lower taxes today needs higher taxes in the future. (if there is no change in government purchases). Thus by issuing government debt to finance tax cut does not show a reduction in overall tax burden, but it represents a postponement of tax.

Rational consumers which are forward looking look ahead to future taxes implied by government debt. Consumers will not increase their consumption in response of tax cut, because they understand that there total tax burden is not changed. Consumer will respond by increasing their savings today of the amount of tax cut in order to fulfill their future tax liability. So decrease in public savings (budget deficit) will met by the increase of the same size of private savings, so there is no change in national savings. Ricardian equivalence argument combine two basic ideas, the permanent income hypothesis and government budget constraint.

Government budget constraint states that if government purchases remain unchanged, lower taxes today simply means higher taxes in the future.

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Permanent income hypothesis argue that households make their consumption decisions on permanent income which is the present discounted value of income after tax. Debt financed tax cut change the timing of tax liability but does not affect its present value so it has no effect on permanent income and so on consumption.

Robert Barroo (1974) paper " Are Government bonds net wealth" is another way to have a look on Ricardian equivalence argument. Bond represents an asset to those who own government bonds but are considered as liability for the tax payers. Those who hold bonds become wealthier at the expense of tax payers who become poorer. Households in aggregate are not richer and they should not change their consumption path in response to tax cut, because on net there is no wealth effect.

It is important to note that Ricardian equivalence do not make all fiscal policy that is irrelevant. If households expectation about the cut in government taxes is meet with decrease in government purchases in future, this result in increase in household permanent income and in turn increase consumption. It is important to note that this is not due to cut in taxes that stimulate consumption but it is because there is an expectation of cut in government purchases. Expectations of households about future government purchases reduction will alter consumption and permanent income, because they state low taxes at some time even if there is no change in current taxes.

Ricardian equivalence idea has a distinguished and long history. Robert Baroo (1974) paper is considered to be turning point in government debt literature. Ricardian equivalence conditions were stated more clearly by Baroo then any previous literature and he established well established intergenerational model needed to develop the result. Baroo's framework supports debt neutrality argument. In the academic debate on government debt, Ricardian equivalence idea is extremely important. Ricardian equivalence debate is important because it sets a theoretical benchmark for further analysis.

Ricardian equivalence theorem and Modigliani miller theorem set a theoretical benchmark in economics. Modigliani and Miller theorem states irrelevance of financing choice between debt and equity. Similarly Ricardian equivalence proposition states irrevence of government choice between tax finance and debt. Some finance economists argue that Modigliani miller theorem states firm actual financing decisions. In corporate finance this theorem provides a starting point of many discussions. Similarly if Ricardian equivalence does not state real world it can be seen as starting argument in theoretical analysis of government debt debate.

Next section should make clear, trying to explain why Ricardian equivalence is not true yield a deeper understanding about the effects of government debt on economy. Although most economists today are skeptical of the Ricardian equivalence proposition that government debt is irrelevant.

The conventional argument that debt financed tax cut stimulates consumption . various reasons are proposed for this argument.

One reason to think that government debt matter is that it shows redistribution of resources across different generations of tax payers. When https://assignbuster.com/to-understand-the-ricardian-equivalence-view/ government issues debt and cut taxes today, increase in future taxation is needed for government budget constraint. Future tax increase may fall on taxpayers that are not living yet, current tax payers increase their consumption in response of an increase in their resources.

The argument of intergenerational redistribution states that government debt matter in diamond (1965) and Blanchard (1985) basic overlapping generations model.

Bechers (1974) framework of family is used in the Baroo 1974 paper to provide a clear response to this argument

Baroo argue that it is important to think that future generations are the children and grand children of current generations, so it is not a good idea to think them of an economic actor that are independent. Barro argue that current generations behave altruistically towards future generations. Debate on Ricardian equivalence in fact a debate on how different generations are linked together.

Kotlikoff and summers (1981) argue that large amount of wealth in US economy is bequeathed instead of that it is consumed by its current owner. Many bequests are accidental instead of intentional, people leave bequest because they unexpectedly die before they consume their all wealth.

Baroo altruism model is one possible model of bequest, but there are also other models.

The other popular framework is the" warm glow" or " joy of giving" model in which a person utility depend on the amount of bequest rather than on children utility, that is

denotes utility by giving a bequest of amount

Bernheim et al (1985) proposed a strategic bequest motive that is closely related to this model, which states that parents use bequest in order to induce such type of behavior from their children such as more frequently visiting home.

## **Capital market imperfections**

Capital market imperfections are considered to be one of the main arguments for the failure of Ricardian equivalence. Households that expect rapidly rising income or that discount future utility high, optimal consumption path needs consuming more than there income by borrowing in the financial markets when they are young. Due to the possibility of bankruptcy and default probability they are unable to borrow for their current consumption. Optimal strategy is to hold zero assets and consume all current income. Ricardian equivalence will not hold in the presence of such binding borrowing constraint. Debt financed tax cut gives the loan to households that are constraint which they need but are not able to get it from private markets. Households will increase their consumption in response even though they know that there is higher taxes and lower consumption in the future. So government debt allows many households to consume more than they otherwise would.

Literature has debated over that capital market imperfections are the cause of failure of Ricardian equivalence. Hayashi (1987) and Yotusuzuka (1987) show endogenous capital market imperfection model that is based on asymmetric information. Asymmetric information of the future income in addition to default risk put off households from borrowing against future income. Because taxes are assumed to be lump sum, borrowing constraint have no effect on the ability of household to trade off taxes today and in the future, because there is no information problem about the stream of tax payments. In such scenario debt financed tax cut causes borrowing constraint to adjust their resources in such way as to leave consumption opportunities remain unchanged. Bernheim (1987) states that lump sum taxes is a crucial assumption for this analysis to hold If taxes are proportional to income then asymmetry information of future income yield asymmetry in information about tax liability in future. In this more realistic case debt financed tax cut allows households to consume more by relaxing the borrowing constraint.

## Permanent postponement of the tax burden

## Ricardian equivalence hypothesis states that a budget deficit today requires higher taxation in future.

Infact government has never to pay off its debt. When government runs budget deficit by a cut in taxes it can indefinitely postpone the entire tax burden. This argument raises a number of important questions in economic theory. Ricardian equivalence does not need that government pays off its debt in the way of reaching nill indebtedness. Suppose that for one year the government cut taxes by, raise the debt by that amount, and leave government debt forever at a new higher level. Additional taxes of amount every year is required to finance this additional debt where r is interest rate on government debt. is the present discounted value of these higher taxes, which fully offset the value of tax cut. Ricardian equivalence holds, although government never retires additional debt which is issued, if consumers look ahead to all streams of future taxes.

Things become more complicated if government do not raise taxes to finance on additional debt, but finances these interest payments by raising more debt. This method is referred as Ponzi scheme. Government debt will grow at rate if government follows such ponzi scheme, and there is no higher taxes and budget deficit in the future due to the initial tax cut. It is important to note that can government pursue this ponzi scheme.

Literature has discovered this question broadly.

Important issue is the comparison between growth rate of the economy and the interest rate on government debt. If is less then then government debt will increase more fast then the economy, and the ponzi scheme is render infeasible eventually, the debt will increase so fast that government is not able to find buyers for all of it, forcing either tax increase or default. On the other hand if is higher than , then the government debt will grow more slowly then the economy, and there is nothing to stop the government from issuing more debt. Comparison between and help explain the effect of government debt. According to neoclassical growth theory, denotes technological change and population growth and rdenotes marginal product of capital. These variables are used to determine whether the economy has attained efficient dynamic equilibrium. If is less then then the economy is considered to be efficient because it has accumulated less capital then the steady state level, "Golden Rule" steady state. On the other hand if is greater than then the economy is inefficient because it has accumulated too much capital. In such a scenario there is an increase in consumption in all periods if there is a reduction in capital accumulation.

Government ponzi scheme is both desirable and feasible because it helps andovate the oversaving problem in such an economy.