

# The Burden of Government Bonds on Future Generations

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Fiscal expansion by the Reagan administration and the Obuchi cabinet decreased unemployment, while a raise in consumption tax imposed by the Hashimoto cabinet in 1997 increased unemployment. These facts seem to indicate the effectiveness of Keynesian policy<sup>(1)</sup>. In a period of recession, when workers are unemployed and plants and equipment are idle, tax cuts and a public expenditure-increase can boost production.

In today's Japanese economy, however, public expenditure must be financed by the issuance of government bonds. Given this, the fear that further issuance of bonds by a nation which already holds a considerable outstanding bond debt will place a further burden on future generations is the most significant impediment to increased government expenditure. This essay will consider whether or not this fear is justified<sup>(2)</sup>.

## **Government bonds and the total assets of future generations**

The fear which I have stated above can be interpreted as meaning that the living standard of future generations will decline if the government

issues bonds today.

The living standard of future generations, for example the generation which will be living in Japan 30 years hence, will be dependent on the level of the capital assets of both private and public sectors that exist in the country at that time, whereas the capital assets include mechanical equipment, universities, roads, human capital, and IT infrastructure. In other words, the usefulness of the capital assets that present generations leave behind will affect the living standard of later generations.

On the other hand, the living standard of future generations is not affected by whether those assets are financed by taxes or by domestically issued bonds.

If the bonds are issued domestically, the taxes paid by citizens will be transferred to other citizens, and the total assets of future generations will remain the same. This is to say that bond issued domestically would not in itself influence the living standard of future generations. We may call this an evaluation of inter-generational income transfer from the perspective of "total assets."

## **Government bonds and the net lifetime burden of future generations**

Having said that, if bonds are issued today, then taxes will be increased in future to allow for their redemption. If issuing bond increases the “lifetime net burden” (in relation to the government) of one future generation, this will cause a transfer of income from one generation to another. An evaluation of inter-generational income transfer from the perspective of “lifetime net burden” therefore appears to contradict an evaluation from the perspective of “total assets”.

However, there is no actual contradiction. I will demonstrate this point. First, there are numerous ways in which the living standard of one generation is affected across its lifespan by the government. The living standard of future generations across their lifespans will depend not only on the tax burden, but also on the burden of social insurance premiums. It will also depend on government transfer income (including pension payments and medical services) and the provision of public services utilizing public goods. We can summarize this as follows:

Lifetime net burden  
= Lifetime tax burden + Lifetime social insurance premium burden  
– Transferred income from government –  
Public services generated by public goods.

A comparison of “lifetime net burden” between generations will reveal the real transfer between generations. (This type of comparison of net lifetime burden between generations is called

“generational accounting”.)

## **Useful public expenditure and useless public expenditure**

Using the formula defined above, I will now consider three cases to determine the effect of the financing of public expenditure by bond issuance on future generations.

Case 1: First, I will consider a case in which a previously planned future public work project is moved up and is executed today, financed by bonds. At the time of redemption of the bonds, the tax burden will increase in order to finance the redemption, but at the same time the formally scheduled tax burden to finance the public work project then will be now reduced. In this case, therefore, there is no change in the term of “lifetime net burden” defined above<sup>(3)</sup>. This bond issue would not increase the tax burden on future generations.

Case 2: Let us assume that previously planned future public expenditures will be executed in the future as planned., which a formally unplanned expenditure for a new public work project (for example, a natural energy development project) is executed today as an economic stimulus measure. Assume that this expenditure passes a cost-benefit test and is financed by bonds issued today. In this case, the lifetime tax burden on future generations will increase. However, because this was a project which passed a cost-benefit test, the benefit from public services received throughout their lifetimes will increase to a greater extent than this increase in tax burden. Therefore, the first term in the formula above will increase, but this will be more

than offset by the increase in the final term, resulting in an overall decrease in the net lifetime burden.

Case 3: For our final case, let us assume that an unnecessary public expenditure, which does not pass a cost-benefit test, is conducted as an economic stimulus measure financed by public debt.

In this case, at the time of redemption of the bonds, already-planned future public expenditures will also have to be conducted and hence the future tax burden will increase by the amount required for bond redemption. The final term in our formula, public services generated by public goods, will not increase, and there will therefore be an increase in the net lifetime burden.

As a comparison of cases 1), 2) and 3) makes clear, the issuance of government bonds does not in itself increase the net lifetime burden of future generations; whether or not the public expenditure executed today is useful or not for the future generations is of decisive importance on the net lifetime burden of future generations.

There is, therefore, no contradiction between the “total asset” method and the “lifetime net burden” method in evaluating the effect of bond issuance today on the lifetime living standard of future generations.

### **Bond issuance that increases future assets**

For decades, the Japanese government has conducted a large number of unnecessary public works, for example for the construction of agricultural roads. Many people therefore quite naturally do not believe that the government has

the ability to move up public expenditures previously planned for the future as today’s economic stimulus measures. This is why many people believe that an increase in the issuance of government bonds will increase the burden on future generations.

However, there are numerous candidates for public expenditure which would be useful for the future, for example hastening work to increase the earthquake resistance of national roads and schools, and the removal of rail crossings in central Tokyo. If public expenditure was conducted on the basis of criteria of efficiency, the issuance of government bonds would, in putting idle resources to work, increase future assets and decrease the net lifetime burden of future generations.

### **Notes**

- (1) See Hatta (2002b) and (2003) for a critique of the argument that fiscal policy has lost its efficacy in Japan.
- (2) The burden associated with government bonds was the subject of debate between Professors Yoshiyasu Ono and Yasushi Iwamoto in the early 2000s. See the list of references in Iwamoto (2002) for further information. My own opinion on the issue is offered in Hatta (2002a).
- (3) This ignores the difference in interest payments arising from the different timings of the investment.

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