

Rejoinder

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IN responding to my *Agenda* article, Professor Quiggin has restated his claim, without any evidential support, that government assets should be valued by having their expected cash flow 'discounted at the real bond rate'. Along with this bold statement, Quiggin makes some statements about my position on the cost of capital and privatisation which are at best misleading, such as that I criticise 'the present value approach'. Nothing could be further from the truth. I very strongly support present value methods as appropriate for valuing both government and private assets. All valuation methods are versions of the present value method. They may appear different in their application; but this is because they are only abbreviations, adopted by practitioners, of the formal present value method.

My position on government asset valuation in a nutshell is that the present value method must be applied *consistently*: risk in the cash flow must be matched by a risk premium in the discount rate, pre-tax cash must be present-valued using pre-tax discount rates (that is, pre-tax costs of capital), and post-tax cash must be discounted at post-tax costs of capital. In this case, the valuation of an asset will be the same regardless of whether a pre-tax or post-tax approach to valuation is adopted. When government owns an asset (on behalf of the public), it receives risky pre-tax cash. Governments do not pay company tax, so their opportunity cost of capital is pre-company tax. As governments cannot eliminate the equity risk in their business assets, they must use an appropriate risk premium when valuing risky cash. Hence, an asset owned by government will have the same value as when it is owned by the private sector, assuming the same operating efficiency. The mere fact of government (as opposed to private) ownership does not alter the value of an asset.

Quiggin purports to refute this argument by asserting that assets should be valued at the government bond rate when owned by the government but valued at the private sector's weighted average cost of debt and equity capital when privately owned. In this way, he claims, assets will have greater value under public ownership than under private ownership.

After paying operating costs, businesses generate cash that goes to service its providers: some is paid to debt holders who hold contracts enforcing these payments, some (in the case of private firms) is paid to government as company tax, and the remainder is paid to equity holders who hold no formal contracts specifying payment. Equity is typically riskier than debt because of these contractual arrangements.

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Quiggin's claim that all cash must be discounted at the bond rate is equivalent to asserting that government's equity cash flow must be discounted at the debt rate, and not at a rate that reflects equity capital's higher risk than debt capital's. This would make sense only if in some way a government could totally eliminate the additional risk of equity capital.

The private sector demands a risk premium for bearing equity risk over debt risk. If governments own assets on behalf of those same private citizens, Quiggin would have us believe that these governments can totally eliminate the risk in some way that the private sector cannot. The evidence is lacking. He does introduce the results of Mehra and Prescott (1985), who claim that the equity risk premium is too high. However, Quiggin goes further than this. His claim that governments should present-value assets by discounting both equity and debt cash at the bond rate is the same as using a *zero* risk premium for the equity component of the capital. Quiggin addresses this issue by way of asserting that in the past researchers were not aware of the *size* of the equity risk premium. Even if this was the case, it does not change the *logic* of the argument. Unless it can be demonstrated that the extra risk due to holding equity over debt could be reduced or even eliminated by government ownership, then, regardless of the size of the equity risk premium, it should still be applied to valuing government assets.

One argument that Quiggin cites to explain the equity risk premium is that private investors cannot insure against the occurrence of recessions. Because of recessions, the cash flow from a business enterprise is risky; and as this risk cannot be eliminated, it must be 'self-insured' by discounting the expected cash at a higher discount rate (equivalently, reducing the expected cash and discount at the risk-free rate). This may well be a good explanation of the risk premium. However, then to claim that governments should ignore it in their asset valuation exercises requires explaining how governments can eliminate this risk. What cash flow to government *increases* in recessionary periods to offset (diversify) the lower cash flows from government business enterprises (GBEs)? Governments are hardly likely to increase taxation collections during recessionary periods. They may run higher deficits (increase debt liabilities) to offset the decline in equity cash flow from GBE dividends, or they may demand higher dividend payouts from their GBEs (who in turn may have to borrow to replace this capital). Private sector businesses may also undertake additional borrowing in recessionary periods. Such increased borrowing amounts to changes in *gearing* of the investments. It does not alter the fundamental riskiness of equity cash flow.

Recessions are by no means the only risk faced by equity owners. Changes in market structure and technological risk are but two sources of risk borne directly by shareholders. They must be borne by shareholders, since debt holders have contractual claims that must be met before shareholders receive any cash flow (by way of dividends or capital). These risks are faced equally by private and government businesses. Hence, the occurrence of recessions is unlikely to be the sole explanation of the equity risk premium. There are many ways for shareholders to lose their capital other than through their companies performing badly in times of recession.

Other questions that Quiggin raises about my article, such as the efficiency of a privatised enterprise, are not germane to my central point, which is that, given the *same* operating efficiency of an enterprise, the cost of capital relevant to government or private owners results in the *same* asset value. Clearly, changes in efficiency of the enterprise will result in changes in its valuation; but this will happen under government *and* private ownership.

In summary, Quiggin has responded to my article with an analysis which simply claims that:

1. the cost of capital for governments is the bond rate; and
2. the cost of capital for governments lies somewhere between the bond rate and the private sector rate.

These claims flow from the assertions that equity risk to governments can be fully eliminated (claim 1) or partly eliminated (claim 2). No evidence is advanced to support these assertions. We can observe the premia that world capital markets charge for equity risk. We would reduce these risk premia when valuing government assets only if we were aware of evidence showing that governments can reduce or eliminate these risks. In the absence of any evidence that government ownership can eliminate any of the risk, we should apply these observed risk premia to government asset valuations.

Reference

Mehra, R. & E. Prescott (1985), 'The Equity Premium: A Puzzle', *Journal of Monetary Economics* 15(2): 145-61.