

The Theory of Debt Management

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Debt management and the government's objectives

- Debt management and monetary policy
- Debt management and financial markets
- Debt management and fiscal policy
- Debt management and credibility

Does debt management matter?

- Theoretically, households can "undo" government portfolio changes \Rightarrow economic activity remains unchanged
- Key assumptions:
 - forward-looking consumers
 - perfect capital markets
 - lump sum taxation

Debt management and monetary policy

- Portfolio approach to debt management: by changing the supply of government securities, the government can affect the prices of other securities
- Assumes that consumers view public debt as net wealth
- Empirical evidence for UK is weak
- May be more important if debt levels are very high

Debt management and financial markets (I)

- Government debt can help investors manage risk by providing a risk-free asset:
 - increases the amount of "insurance" against bad events available to the investor
 - taxpayers may be exposed to more risk through more variable taxes
- ⇒ trade-off between interests of taxpayers and investors

Debt management and financial markets (II)

- Government debt as a form of liquidity:
 - government debt can act as unique form of liquidity, ease private sector borrowing constraints
 - an argument for generally providing liquidity at times of economic stress?

Debt management and fiscal policy

- Why not just minimise cost?
 - cost reductions may lead to increase in risk for taxpayers
 - rational investors will be aware of government's intentions, making cost-minimising opportunities harder to secure
 - predictability has its own rewards - reduces risk premium attached to government debt
- ⇒ need to take account of risk

Reducing cost: market structure

- Improving market microstructure can increase overall gains from trade
- Method of sale can affect revenue of the seller
- Micro reforms can theoretically be applied to any type of bond, compatible with range of preferences for risk
- Concern for liquidity may limit the number and type of government securities available

Reducing cost: preferred habitats

- Some investors may be prepared to pay a premium for certain types of bonds eg pension funds demand long-term bonds, index-linked gilts
⇒ creates a supply effect for particular types of bonds
- Need to consider underlying market imperfection and why it exists

Defining risk

- Market risk, ie change in market value of portfolio (the holding-period return)
 - ⇒ issue variable-rate bonds
- Refinancing risk, ie the risk of refinancing at an unfavourable interest rate
 - ⇒ issue long-term (nominal) debt
- Fluctuations in debt interest costs
 - ⇒ issue long-term debt (real or nominal?)
- Exchange rate risk
 - ⇒ issue domestic debt

The government balance sheet

- Conventional balance sheet:

Assets minus liabilities = net worth

- Government's long-term budget constraint:

Current market value of net liabilities = present value of primary surpluses (T-G)

- Changes in long-term debt hedge against changes to interest rates
- Changes in the market value of debt can also hedge against changes in taxes and spending

The optimal taxation approach

- To ensure overall solvency, shocks to the government's budget constraint require adjustments in taxes or spending
- Because taxes distort incentives, variable taxes are more costly than holding taxes constant over time
- To improve welfare the government should use debt to smooth the burden of taxes over time, ie run surpluses in good times and deficits in bad times
- But permanent shocks to economic variables still require changes in taxes

Tax-smoothing using the return on debt

- If the return on debt was contingent on realisation of different economic shocks, this would reduce the need to change taxes
- Debt would act as “insurance” against shocks to budgetary variables
- Perfect insurance would lead to very little variation in budget deficits and the level of debt, but very large variations in the cost of debt

Using conventional debt instruments as insurance

- Different portfolio mixes can help to hedge against different types of economic shocks
- For example, if inflation tends to rise when output falls, then use of nominal debt can help to smooth overall budgetary finances, because the cost of long-term nominal debt falls as inflation rises
- If prices and output move together, better to hold index-linked debt

Debt management and credibility

- Because nominal domestic debt can be inflated away, it creates a temptation to inflate
- Government can reinforce credibility of low-inflation monetary policy by issuing index-linked, foreign currency, or short-term debt, which makes inflation costly
- Disadvantage is that this may increase risk of default

Default and debt management

- Theoretically difficult to suggest why governments commit to repaying debt - reputational effects are likely to be very important
- Recent experiences suggest liquidity crises can be a real problem even if overall fiscal solvency criteria are met
- By increasing cost of repaying debt, may increase risk of default - can lead to "self-fulfilling" debt crises

Achieving macroeconomic credibility

- For countries with low levels of debt and high credit-worthiness, impact of debt management may be limited
- If debt levels are very high, debt management may not be sufficient to substitute for prudent macro policies
- Institutional approaches, eg an independent central bank, may be better at solving the credibility problem for monetary policy

Summary

- Which objectives are most important in determining debt management policy?
 - debt management and monetary policy
 - debt management and financial markets
 - debt management and fiscal policy
 - debt management and credibility

UK debt management

- Debt management and monetary policy should be separate
- Efficient markets + increased aggregate risk limit gains to “playing the market”
- Predictability and certainty help to lower costs over the longer term
- Instead, concentrate on lowering costs through micro reforms + preferred habitats
- Still not enough to determine “optimal” portfolio?

Future work

- Key insight from literature is that debt management policy integral part of fiscal policy
- Definitions of risk and the optimal cost-risk trade-off should be linked to government fiscal objectives
- Need to incorporate real-world objectives eg UK fiscal rules

For More Information:

<http://www.hm-treasury.gov.uk/pdf/1999/top11.pdf>