

Outline for Behzad Diba's Discussion of
Buiter (2005), "The Elusive Welfare Economics of Price Stability ...“

Basic Modeling Assumptions of the Optimal Taxation Literature

Contributions in the tradition of:

1. Mirrlees

There is no lump-sum tax.

Taxpayers are heterogeneous.

Types are private information.

(The anonymity of taxes and incentive-compatibility
constraints of taxpayers play a major role.)

Taxes can be non-linear functions of income, etc.

2. Ramsey

There is no lump-sum tax.

There is a representative agent.

Taxes are proportional to income, etc.

3. Pigou (Corrective Taxes)

There is a lump-sum tax,

and a potentially rich menu of other taxes / subsidies.

Characterize the taxes needed for Pareto Optimality.

Literature on Friedman Rule (with Flexible Prices)

1. There is no lump-sum tax.
2. Mostly in the tradition of Ramsey.

Most authors focus on the claim that money should not be taxed because it is like an intermediate good.

[e.g., Correia and Teles (1996)]

3. da Costa and Werning (2005) make a stronger (and sharper) case for the Friedman Rule, in the tradition of Mirrlees.
e.g., in a shopping-time model, money should not be taxed because agents with higher work effort (less spare time) demand more money.

This Paper

1. There is a lump-sum tax.
2. Taxpayers are heterogeneous, but the fiscal authority knows their types (here, time endowments). So, incentive-compatibility constraints play no role.
3. In Section 3.2, there is a very rich menu of taxes/subsidies.
Characterizes corrective taxes needed to get Pareto Optimality.
4. Subsequent sections impose anonymity and other restrictions on taxes (but retain the lump-sum tax).

5. Practical concerns?

- A. Hard to motivate firm-specific taxes.
- B. Consumer and producer prices may diverge.
- C. How long is one period? Same for households, firms, the central bank, and the fiscal authority?

6. Formal (model-based) concern:

Why consider cases with no interest payment on money?

Why not use the lump-sum tax to subsidize money holdings and production, and set inflation to zero?

Literature with Sticky Prices

1. Early contributions abstracted both from fiscal policy and from monetary frictions.
2. Why set aside monetary frictions?
 - A. Formal justification: Cashless Economy.
 - B. Real reasons? Concerns that a deflationary equilibrium may not work so smoothly in reality? Interest-rate rules? Zero bound?
3. The “result” that optimal inflation is zero in the steady state is obviously rigged. But does this negate the main claim that optimal inflation volatility is (near) zero?

4. This claim-- (near) zero inflation volatility-- is not contradicted by

$$(75) \quad \Pi_{t,t-1} = \Omega_{t,t-1}$$

if there is no indexation or there is partial indexation to lagged inflation.

5. But the paper argues that sensible indexation rules must satisfy the “minimal long-run consistency or ‘eventual learning’ assumption”

$$(26f) \quad \bar{\Pi} = \bar{\Omega}$$

6. Calvo and Taylor contracts, and Levin’s generalization.

7. How much do we know about indexation rules?

Three Recent Papers

1. Benigno and Woodford (2003) abstract from monetary frictions but consider fiscal policy, broadly in the tradition of Ramsey. They assume Calvo contracts with no indexation. They find that optimal inflation is zero in the steady state-- which satisfies 26f. They also find that optimal inflation volatility is near zero.
2. Khan, King and Wolman (2003) abstract from fiscal policy but allow for a monetary friction (cash and credit goods). Their price setting scheme follows Levin (1991)-- so, 26f is not compelling-- and assumes no indexation. In their preferred calibration, the steady-state rate of deflation is only about 0.75% per year (under second-best policy). Optimal inflation volatility is very low in all of their calibrations.
3. Schmitt-Grohé and Uribe (2004) consider, in the tradition of Ramsey, both fiscal policy and a monetary friction (transactions costs). They use Rotemberg's setup with price adjustment costs-- so, 26f does not apply. They find very low optimal inflation volatility and large optimal deviations from the Friedman Rule-- in their baseline economy, the nominal interest rate is 3.8% per year, on average.

REFERENCES

Benigno, Pierpaolo and Michael Woodford (2003), “Optimal Monetary and Fiscal Policy: A Linear-Quadratic Approach,” in Mark Gertler and Kenneth Rogoff (eds.), NBER Macroeconomics Annual 2003, 271-333.

Correia, Isabel, and Pedro Teles (1996), “Is the Friedman Rule Optimal when Money is an Intermediate Good?” Journal of Monetary Economics, 38, 223-244.

da Costa, Carlos, and Ivan Werning (2005), “On the Optimality of the Friedman Rule with Heterogeneous Agents and Non-Linear Income Taxation,” MIT working paper.

Khan, Aubhik, Robert King and Alexander Wolman (2003), “Optimal Monetary Policy,” Review of Economic Studies, 70, 825-860.

Levin, Andrew (1991), “The Macroeconomic Significance of Nominal Wage Contract Duration,” UC San Diego discussion paper.

Schmitt-Grohé, Stephanie and Martin Uribe (2004), “Optimal Fiscal and Monetary Policy Under Sticky Prices,” Journal of Economic Theory, 114, 198-230.