# Political Economics

Lecture 1

# Introduction Credibility and fiscal policy

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# Traditional public economics

- Govt. objectives: utilitarian social welfare
- Govt. chooses: state-contingent policy rule once and for all
- Govt. constraints:
  - Economic behavior of agents
  - Lack of information
- Maintained assumptions: equilibrium, rationality
- Role of policy advisor: suggest appropriate policy rule (relax informational constraints)

# Political economics

- Govt. objectives: opportunistic (votes / rents) or ideological
- Govt. chooses: policy action, sequentially
- Govt. constraints:
  - Economic and political behavior of agents
  - Lack of information and lack of credibility
- Maintained assumptions: equilibrium, rationality, delegation
- Role of policy advisor: suggest institutional reforms, influence public opinion (relax incentive constraints - politics or credibility)

### Course Outline

#### **Economic Conflict**

#### **Political Interaction**

- 1. Externalities
- 2. One-dimensional eg: welfare state
- 3. Agency eg: corruption
- 4. N-dimensional eg: special interest politics
- 5. Intertemporal policies eg: debt, growth
- 6. All kinds of conflict

- 1. Lack of credibility
- 2. Electoral competition
- 3. Political Accountability
- Lobbying, legislative bargaining
- 5. Opposition to reforms
- 6. Comparative politics: compare different political institutions

# Credibility and economic policy Basic points

- Lack of credibility = inability to influence expectations
- Reflects incentive problem: govt. lacks some policy instrument, and policy surprises help him i.e. implicit conflict due to externalities
- In equilibrium: no policy surprises occur, and govt. is worse off
- Remedies: institutions to relax incentive constraints
  - Eg: exchange rate peg, inflation targets
- Optimal institution design: tradeoff credibility vs flexibility<sub>5</sub>

#### Credibility and capital taxation

Question: How is tax structure determined?

Focus: Capital (K) vs Labor (L)

Optimal taxation: Tax labor much more than capital

Not observed: average of 14 OECD countries, 1991-95:

effective tax on L  $\approx$  effective tax on K  $\approx 38\%$  - cf. Table 1

Here, additional determinant: lack of credibility.

#### Results:

- 1. Capital is over-taxed in equilibrium (capital levy problem)
- 2. Multiple equilibria (confidence crisis) and debt runs
- 3. Public debt management to relax incentive constraints

Table 1
Effective taxes on labor and capital

	1965-70	1971-80	1981-90	1991-95
	1 -1-			
Labor taxes				
Europe	27.1	35.4	40.4	42.6
USA	20.1	24.6	28.6	27.4
Japan	16.0	19.4	25.8	27.7
Capital Taxes				
Europe	24.8	31.0	36.3	34.8
USA	42.0	44.5	40.7	41.1
Japan	20.5	30.7	44.5	43.9

#### A simple model

Two period economy, with representative consumer:

$$w^{i} = U(c_{1}^{i}) + c_{2}^{i} + V(x^{i}).$$

 $c_t^i = \text{consumption in period t},$   $x^i = \text{leisure (enjoyed in second period only)}$ subject to:

$$c_1^i + k^i = 1$$
 
$$c_2^i = (1 - \tau_K)k^i + (1 - \tau_L)l^i; l^i + x^i = 1$$

 $k^i$  = investment in storage technology;  $l^i$  = labor time  $\tau_K$ ,  $\tau_L$  =capital and labor income tax rates, respectively.

#### Economic equilibrium

Private sector behavior summarized by simple and well behaved labor supply and investment functions:

$$l = L(\tau_L), \qquad k = K(\tau_K)$$

with elasticities:

$$\epsilon_K(\tau_K) = \tau_K K_\tau / K, \qquad \epsilon_L(\tau_L) = \tau_L L_\tau / L < 0$$

subscripts denoting partial derivatives; i.e.:  $K_{\tau} = \frac{\partial K}{\partial \tau}$ , etc.

Government budget constraint (G fixed):

$$G = \tau_L L(\tau_L) + \tau_K K(\tau_K) \tag{1}$$

Three implicit assumptions:

Government consumption in second period only

No lump sum taxes available

Atomistic consumer, taking average tax bases L(.) and K(.) as fixed, and hence neglecting govt. budget constraint.

#### Ex-Ante Optimum

Timing:  $\tau_K$ ,  $\tau_L$  set at start of period 1, before investment decisions Government: Max  $W(\tau_K, \tau_L)$ , subject to govt. budget constraint, (1)

Optimal tax structure:  $\epsilon_K(\tau_K) = \epsilon_L(\tau_L)$ 

Ramsey rule: equate marginal distortions on last dollar raised on each tax base

#### Implications:

- 1.  $\tau_L > 0$ ,  $\tau_K > 0$ , since both  $\epsilon_K, \epsilon_L > 0$
- 2.  $\tau_L$ ,  $\tau_K$  move together over time, as G varies
- 3.  $\tau_L > \tau_K$ , since labor tax base is more inelastic
- 4. Infinite horizon version:  $\tau_K \longrightarrow 0$  (distortion between current / future consumption grows with distance between consumption dates).

Note: if labor markets not competitive, labor tax more distorting than capital tax

#### Ex-Post Optimum (Fischer 1980)

Timing:  $\tau_K$ ,  $\tau_L$  set at start of period 2, after investment decisions.

Equilibrium: (i) policy ex-post optimal; (ii) private sector optimizes and has rational expectations.

(i) Government: Max  $W(\tau_K, \tau_L)$ , subject to govt. budget constraint, (1), and taking k as given

Ex-post,  $\epsilon_K = 0$ , implying  $\tau_K = 1$  if  $k \geq 0$  and  $\tau_L > 0$ 

(ii) In equilibrium with rational expectations:

$$k^i = K(\tau_K^e), \qquad \tau_K^e = \tau_K$$

If  $\tau_K^e = 1$ , then K = 0.

#### Equilibrium with discretion

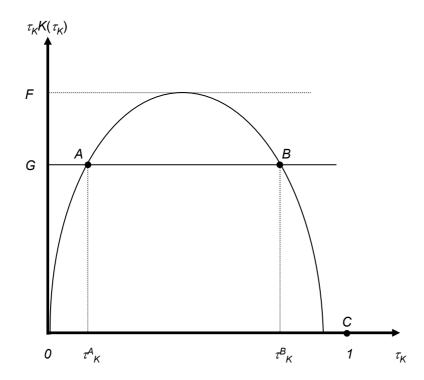
Combining (i) and (ii), equilibrium has:

$$\tau_K = 1, \qquad \tau_L = G/L(\tau_L)$$

Two inefficiencies: both  $\tau_K$  and  $\tau_L$  are too high.

Other equilibria are also possible, where

$$\tau_L = 0, \qquad \tau_K = G/K(\tau_K)$$



#### **Discussion**

- Here govt. only cares about efficiency. With redistributive or political goals, results less extreme. But overtaxation and multiplicity remain.
- Multiple equilibria and confidence crisis endemic. Key strategic complementarity:

Average 
$$\tau_K^e \Rightarrow K \Rightarrow \tau_K$$

if I think that everyone else expects high taxes, I realize that average investment will be low, and that govt. will be forced to  $\tau_K \uparrow$ . Hence optimal for me to underinvest.

- Benefit of tax competition: incentive to attract capital from abroad offsets lack of credibility.
- International openness: tradeoff. Threat of capital flight prevents over-taxation of capital, but may aggravate risk of confidence crisis.
- Again lack of policy instrument (non distorting tax)

#### **Discussion -** continued

- Almost identical arguments apply to inflation tax (tax on nominal govt. liabilities), and to public debt -see below.
- Similar arguments apply to intertemporal taxation: eg., ex-ante optimal tax on labor takes into account intertemporal substitution effects. But ex-post, these effects are neglected.
- Key idea: credibility problems whenever ex-ante elasticity differs from ex-post elasticity

#### Remedies?

2nd best, to avoid 3rd best outcome:

- Reputation
- Strategic delegation: eg. elect right wing politician who has a stake at keeping  $\tau_K$  low (cf. North & Weingast history of parliamentary institutions in the UK: the King needed credible commitment not to default on his debt).
- Keep open international borders.
- Facilitate anonimity of savers (eg. bank secrecy).