Do banking secrecy and withholding taxes discipline Leviathan governments abroad?

Presentation draws on two of our papers:

1. **Welfare and distribution effects of bank secrecy laws.**
Department of Economics, University of St. Gallen, *Discussion paper* #2005-7

2. **Can tax evasion tame Leviathan governments?**
Department of Economics, University of St. Gallen, *Discussion paper* #2006-17

The continuing debate on bank secrecy

- **International Institutions and Organizations**

  OECD, IMF, EU commission

- **The discussion within the European Union**

  Austria, Belgium, Luxembourg

  Jersey, Dutch Antilles, Madeira, ...

- **EU – Switzerland**

  bilateral negotiations

- **Non-government organizations**

  Bank secrecy and developing countries

- **Academic work**

  Boadway and Keen (1998). *International Economic Review*.

The scope of positions taken

The goal is to secure the integrity of tax systems by addressing the issues raised by practices with respect to mobile activities that unfairly erode the tax bases of other countries and distort the location of capital and services. Such practices can also cause undesired shifts of part of the tax burden to less mobile tax bases, such as labor, property, and consumption, ... [OECD (2000), p.5].

Our results „may point, .., to a useful social purpose for tax havens". [Boadway and Keen (1998), p. 473]

Initial questions

- **Which type of model appears promising?**

  Representative Agents, Overlapping Generations, RBC models, ...

- **In which macroeconomic context do we analyze the issues?**

  Small open economy, large open economy, 2-country model, n-country model; perfect competition?

- **Exogenous and endogenous variables**

  Tax payers‘ honesty (degree of tax evasion), government preferences, international tax cooperation

- **How to make tax rates endogenous**

  Public spending in the utililty function, public spending as a factor of production, income distribution in the utility function

An *n*-country OLG model with 2 types of countries

Firms

operate under perfect competition

$$y = k^{\alpha}$$

$$r = \alpha k^{\alpha-1} - \delta$$

$$w = (1-\alpha)\, k^{1-\alpha}$$

Households

maximize 2-period, lifetime utility

$$U = \log c_y + \beta \log \; c'_o + \psi_i (1+\beta) \log g$$

Government

maximizes 2-period utility, may possess preferences different from households'

$$U = \log c_y + \beta \log \; c'_o + \psi_i (1+\beta) \log g$$

Results

Analytically

possible for some variables, for example:

$$k = \left[s(1 - t_{eu}l_{eu} - t_{ch}l_{ch})(1 - \alpha)\right]^{1/(1-\alpha)}$$

$$c_{eu,o} = \left[(1 - t_{eu}(1 - f) - t_f f)\, r + 1\right] k_{eu}$$

$$g_{eu} = t_{eu}\left[w + (1 - f)\, r k_{eu}\right]$$

$$g_{ch} = t_{ch}\left[w + r k_{ch}\right] + t_f f \frac{l_{eu}}{l_{ch}}(1 - t_{eu})\, r k_{eu}$$

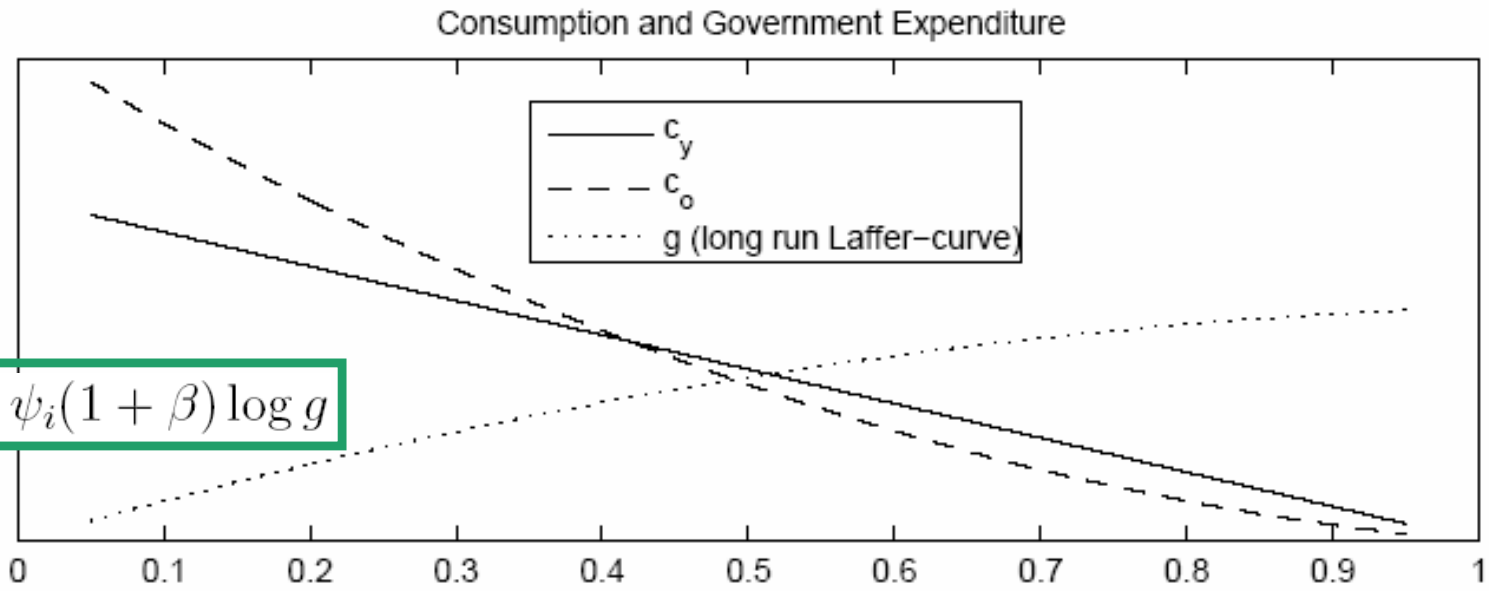
Numerically

after calibration and simulation

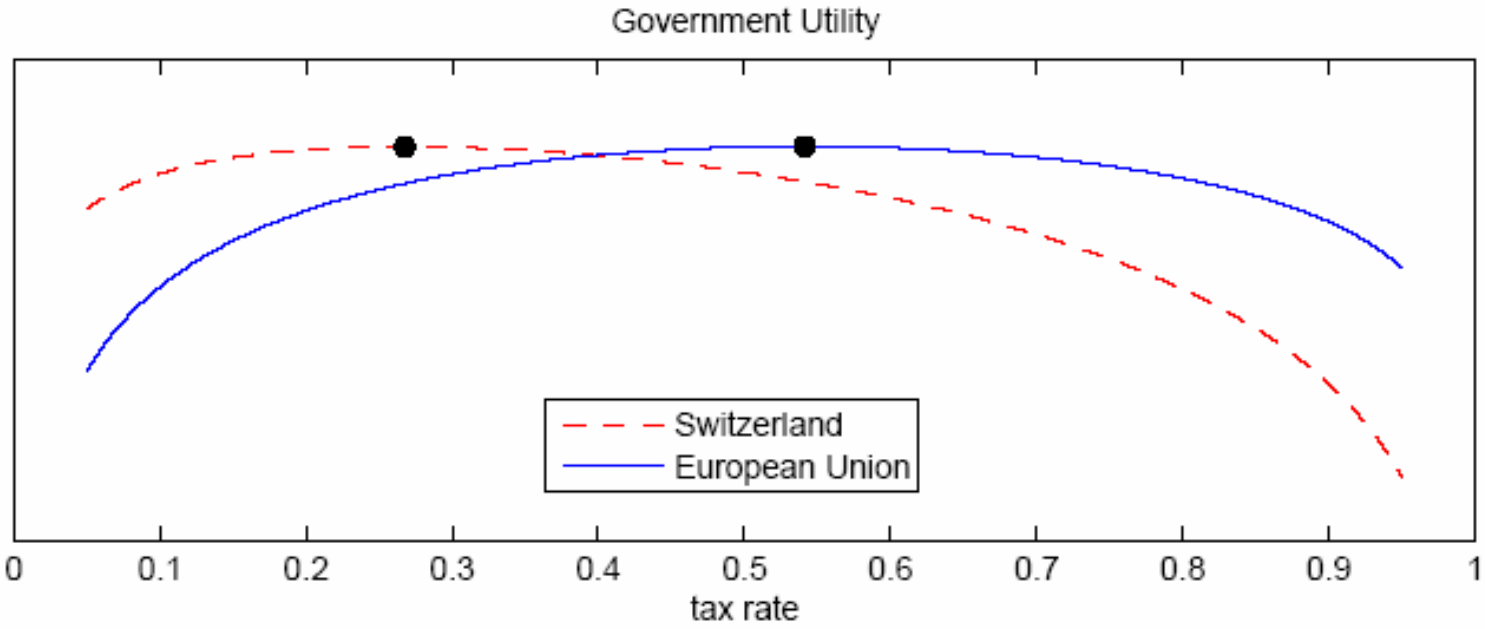
The optimal tax rate

Partial effect of *t* on the three arguments in the utility function

$$U = \log c_y + \beta \log \; c_o' + \psi_i(1+\beta)\log g$$



Effect of *t* on total utility



Initial situation without bank secrecy

		ch countries			*eu* countries		
		(a)	(b)	(c)	(a)	(b)	(c)
t	tax rate	24.78	11.20	-54.82	53.66	54.51	1.59
a	wealth	4,303	5,060	17.60	2,651	2,592	-2.23
c	consumption total	17,347	21,790	25.61	9,249	9,148	-1.09
c_y	consumption young	18,231	21,439	17.60	11,232	10,981	-2.23
c_o	consumption old	16,463	22,140	34.49	7,266	7,314	0.66
g	public spending	5,715	7,673	34.26	10,710	10,550	-1.49
w_{net}	wage rate	22,534	26,499	17.60	13,882	13,573	-2.23
r_{net}	interest rate	3.41	3.76	10.19	2.55	2.63	2.93
GDP		385	384	-0.39	12,839	12,788	-0.39
GNP		454	487	7.35	12,770	12,685	-0.67
Labor income		270	269	-0.39	8,987	8,952	-0.39
Capital income		184	219	18.69	3,783	3,733	-1.32
U				21.96			-1.57

Effect on the global economy

without bank secrecy

with bank secrecy

change in percent

	Global economy		
	(a)	(b)	(c)
k	2699	2663	-1.31
w	29958	29839	-0.39
r	3.98	4.00	0.60
GDP, GNP	13224	13172	-0.39

Effects on the *ch*-type economy

	ch countries		
	(a)	(b)	(c)
t	24.78	11.20	-54.82
a	4,303	5,060	17.60
c	17,347	21,790	25.61
c_y	18,231	21,439	17.60
c_o	16,463	22,140	34.49
g	5,715	7,673	34.26
w_{net}	22,534	26,499	17.60
r_{net} (annualized)	3.41	3.76	10.19
GDP	385	384	-0.39
GNP	454	487	7.35
Labor income	270	269	-0.39
Capital income	184	219	18.69
U			21.96

Effects on the *eu*-type economy

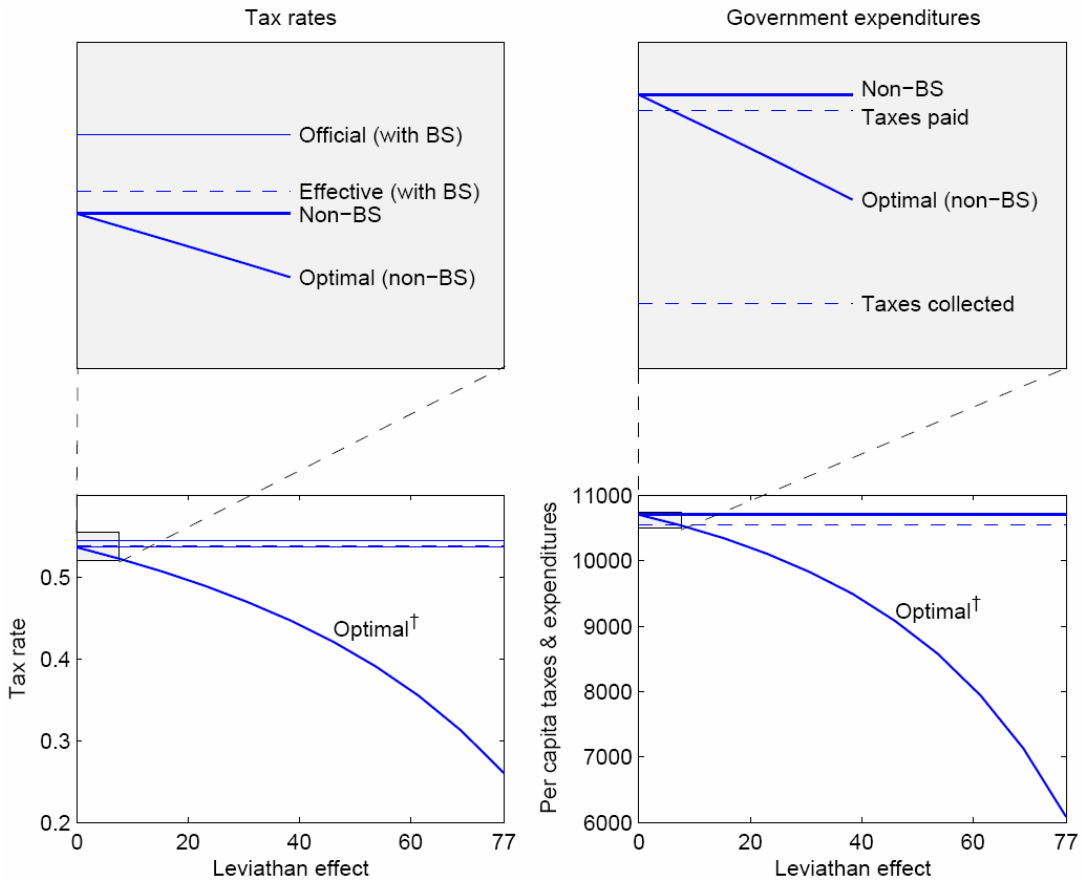
	eu countries		
	(a)	(b)	(c)
t	53.66	54.51	1.59
a	2,651	2,592	-2.23
c	9,249	9,148	-1.09
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The consequences of the Leviathan effect

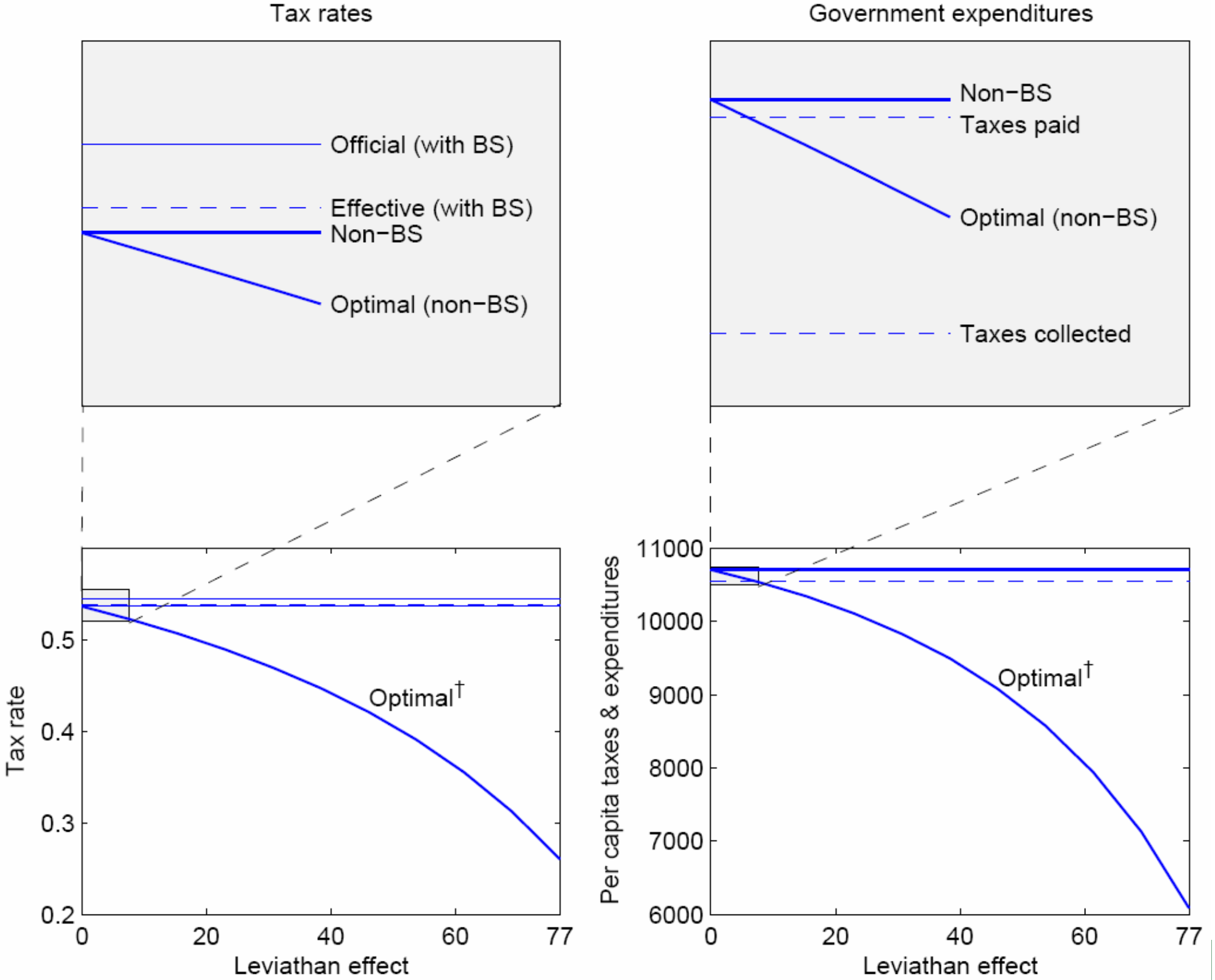
The **Leviathan effect** *LE* denotes the discrepancy between the implemented tax rate and the tax rate preferred by households.

It reflects either **government monopoly power** or is the **result of distorted incentives** (e.g. time inconsistency).

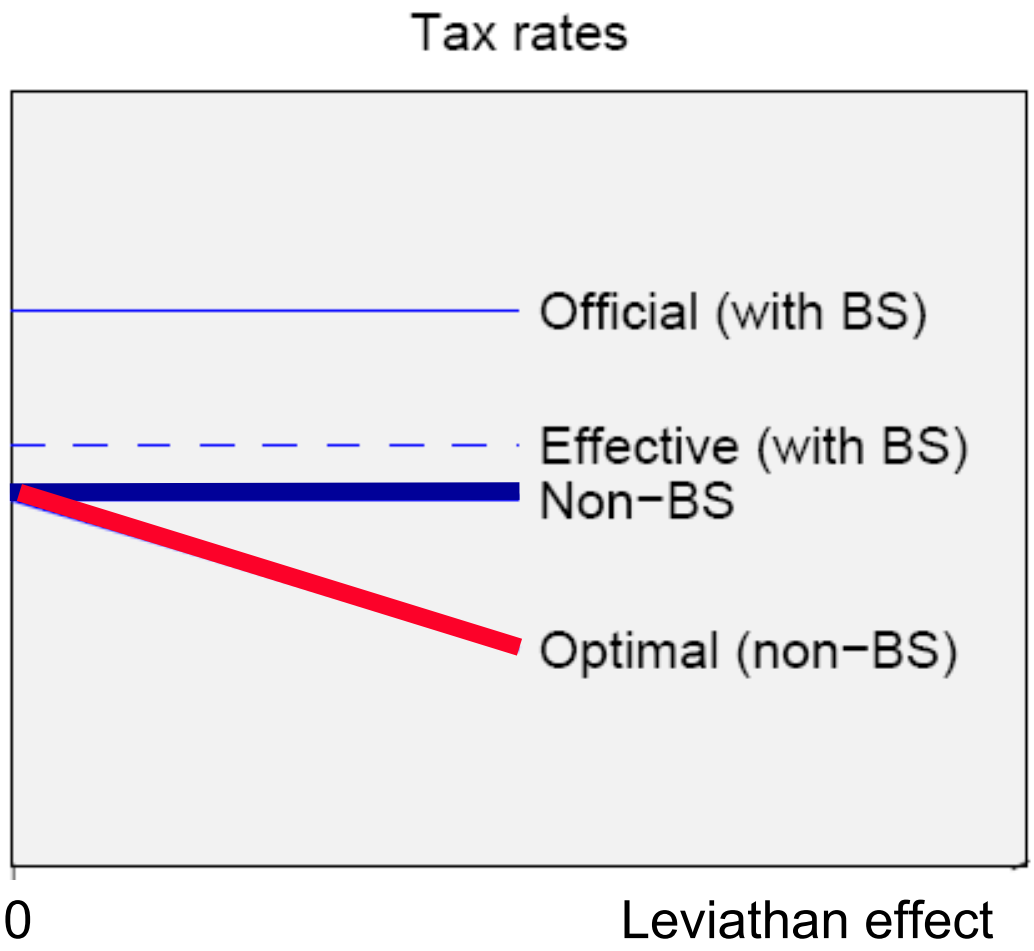
$$LE \equiv 100(\psi_{eu} - \psi_{eu,r})/\psi_{eu}$$

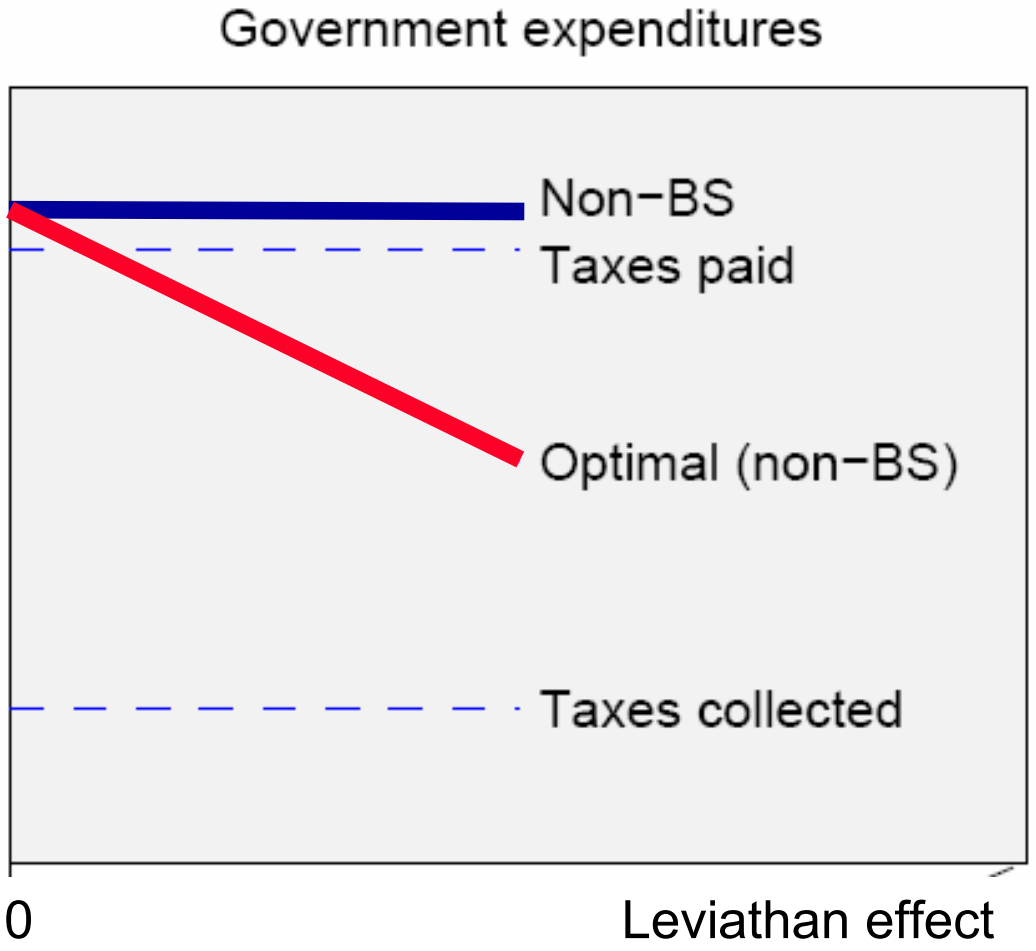


Taxes, public spending and the Leviathan effect

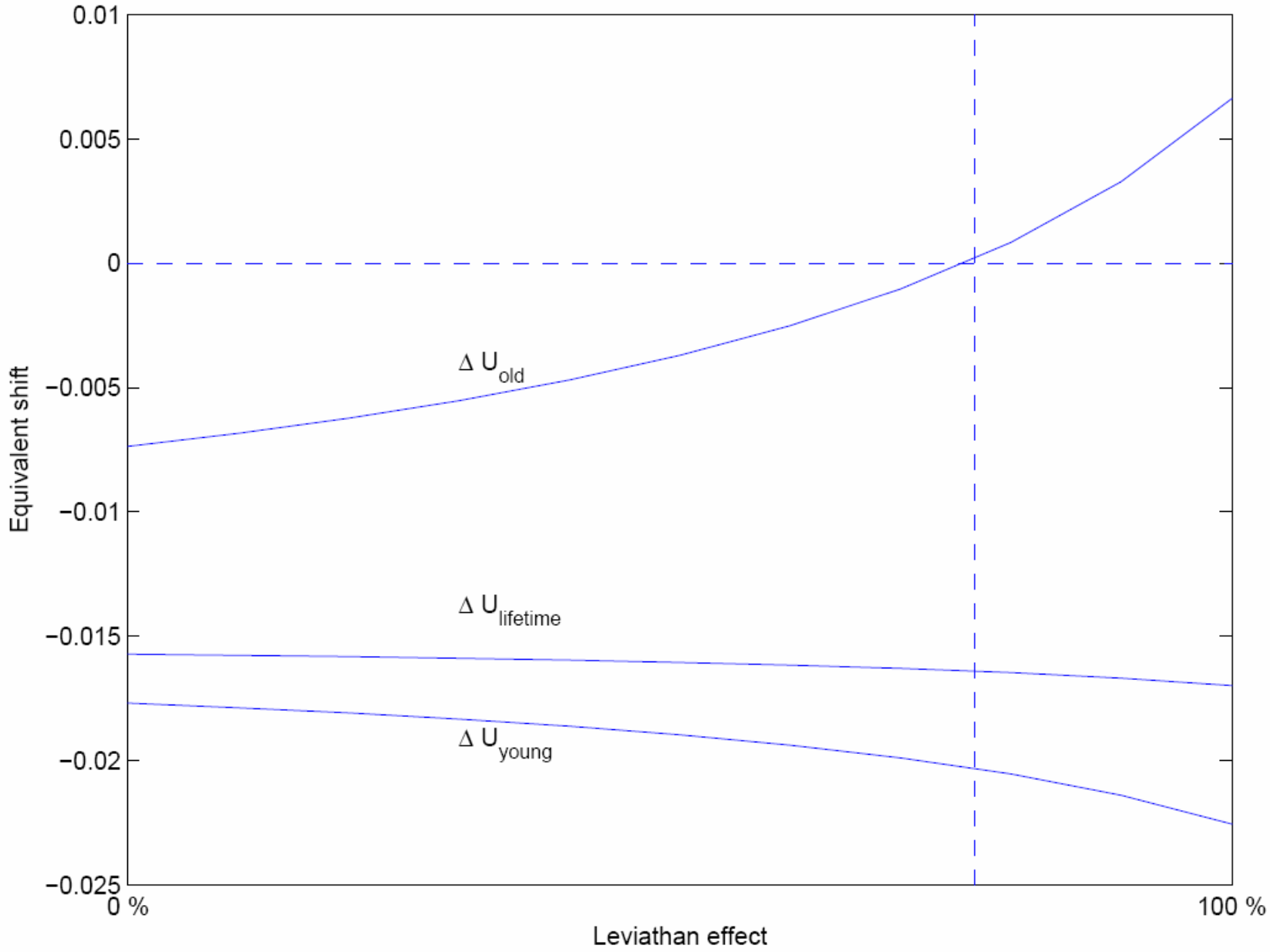


Taxes, public spending and the Leviathan effect





Utility changes and the Leviathan effect



Results

- In open economies with perfect capital mobility tax rates reflects society‘s preferences for public goods.
- Bank secrecy and withholding taxes reduce global capital and income.
- Bank secrecy and withholding taxes benefit the implementing country, but income and wealth in other countries falls.
- Bank secrecy and withholding taxes harm other countries even if they have Leviathan governments in the sense that their tax rates and levels of public spending initially exceed those desired by society.

More questions

- How do these results stand up if the Leviathan effect is endogenous? (deriving from other sources such as *time inconsistency* or *rent seeking*)

- If banking secrecy does not do foreign countries any good, why to they not exploit their political muscle more effectively?

  For answers we must look into the **political economy of removing banking secrecy**:

  What does the **transition dynamics** look like from a system with banking secrecy to one without, and vice versa? How do the short- and medium-run consequences differ from the steady state effects.

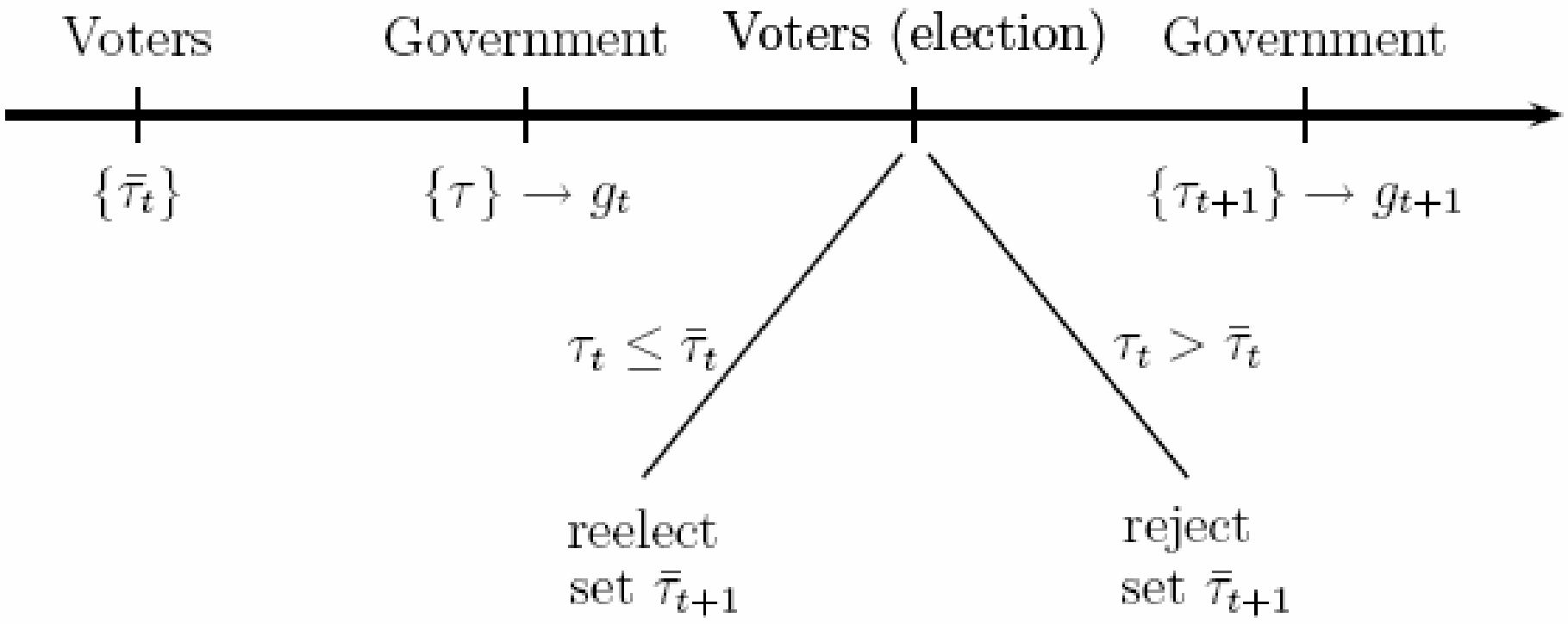
  In a model with **heterogenous agents**, how does the transition dynamics for one generation or type of household differ from that for others? Is there potential for conflict?

Extensions in 2nd paper

1st paper	2nd paper
2 generations Implied period length about 30 years	**16 generations** Implied period length about 4 years, equals length of an election term Generates relevant dynamics Realistic intergenerational diversity
Focus on **steady states**	Focus on steady states, aggregate **dynamics**, and **generational diversity**.
Political process not explicit - either perfect competition (government maximizes voters' utility), or - **exogenous Leviathan effect**	Political process explicit - electoral control model (Ferejohn): Game between voters and rent-seeking government - **endogenous Leviathan effect**

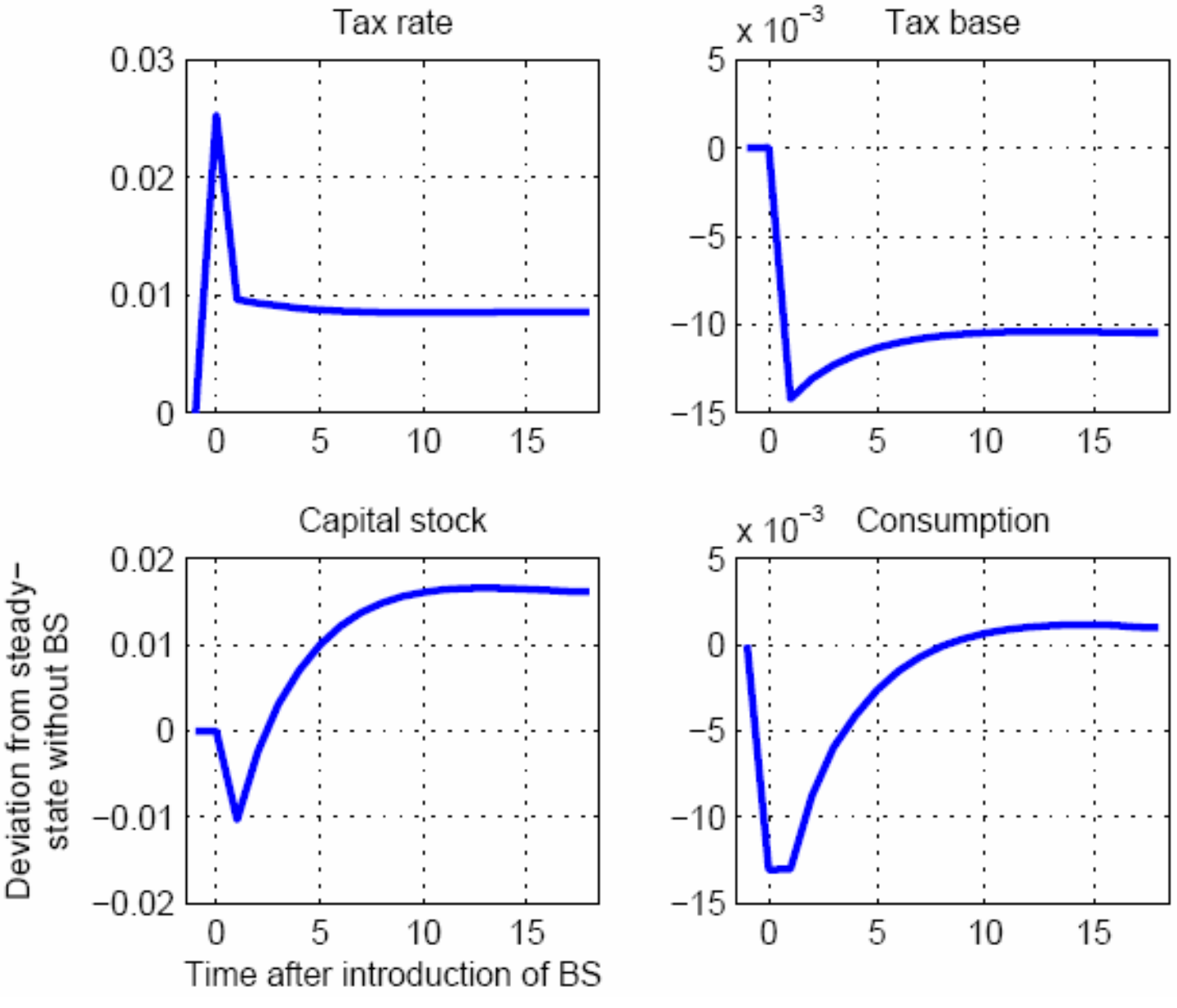
Utility changes and the Leviathan effect

Figure 1: The game between voters and the government: sequence of events



Introducing bank secrecy in the 16-generation OLG model

Figure 3: Introducing banking secrecy: The aggregate perspective



Introducing bank secrecy in the 16-generation OLG model

Figure 2: Steady state consumption profiles

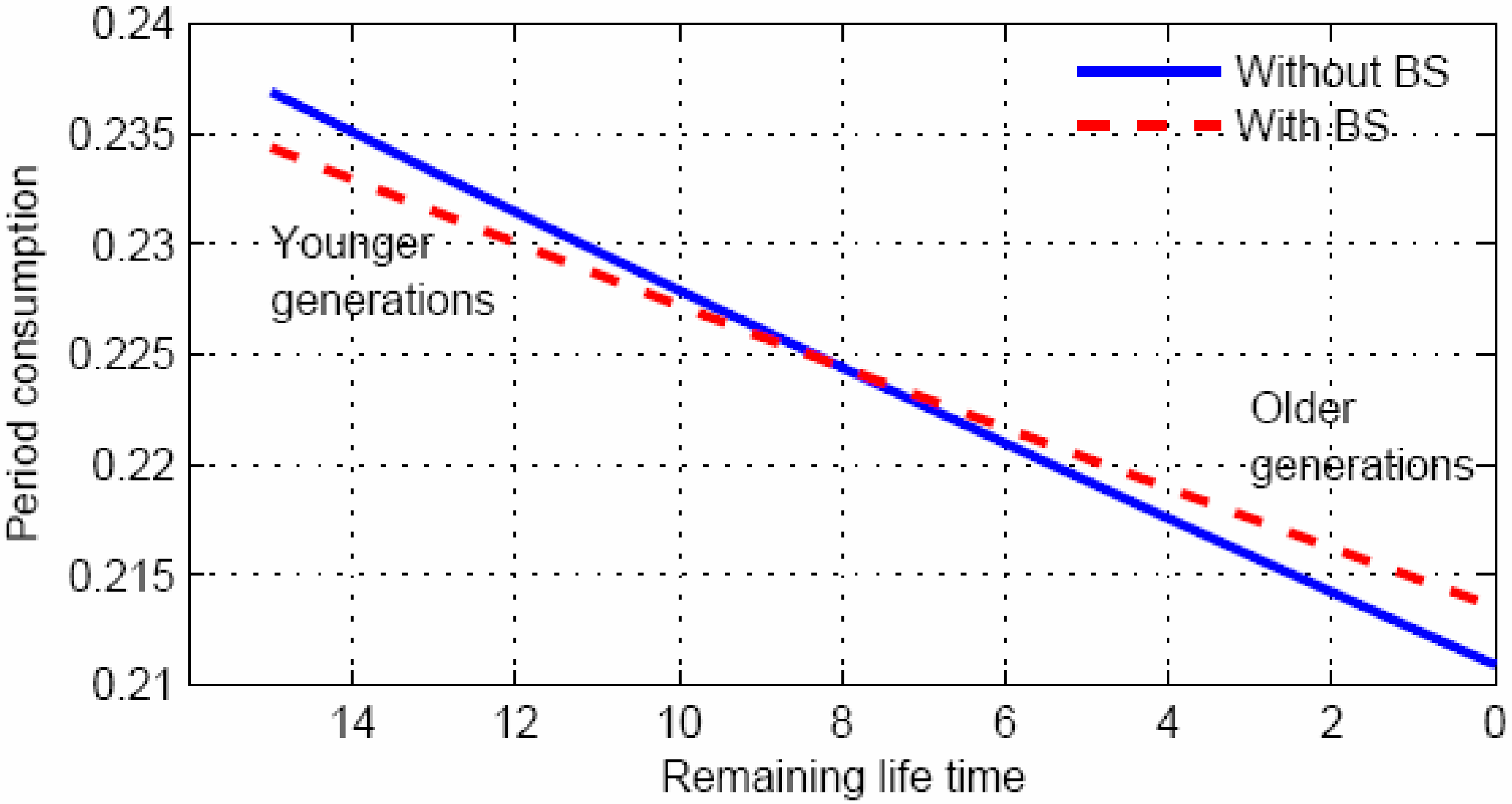
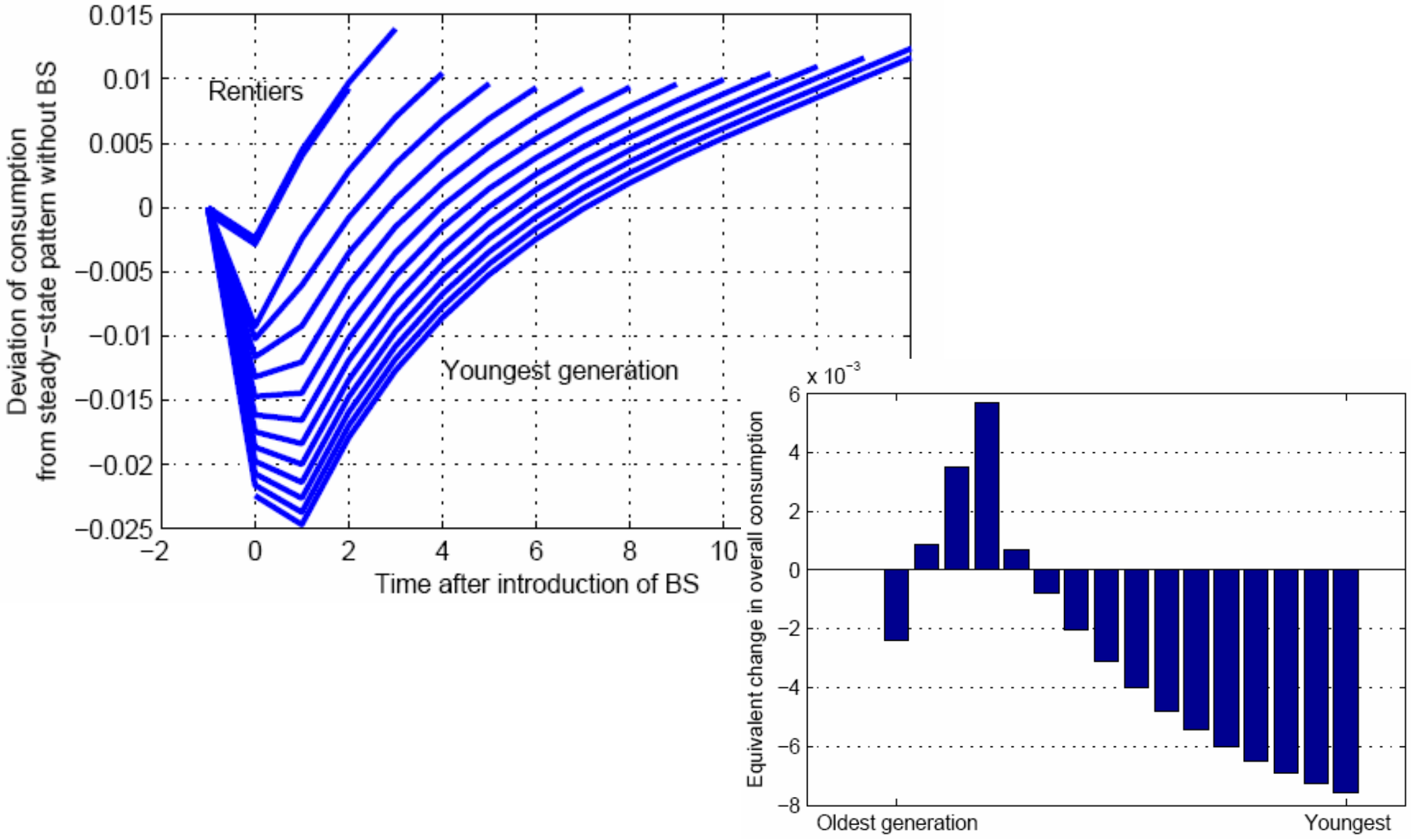
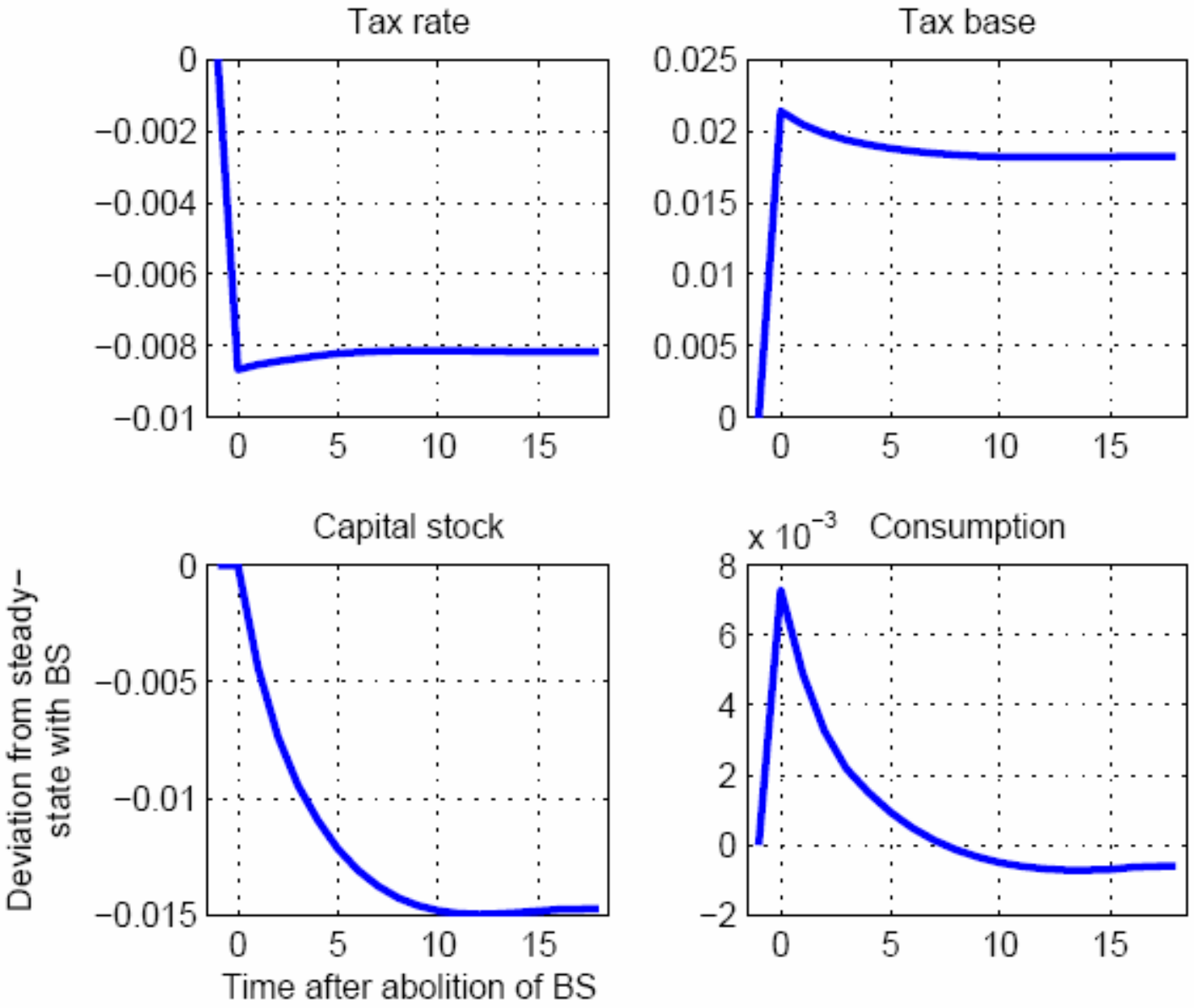


Figure 4: Introducing banking secrecy: The generational perspective



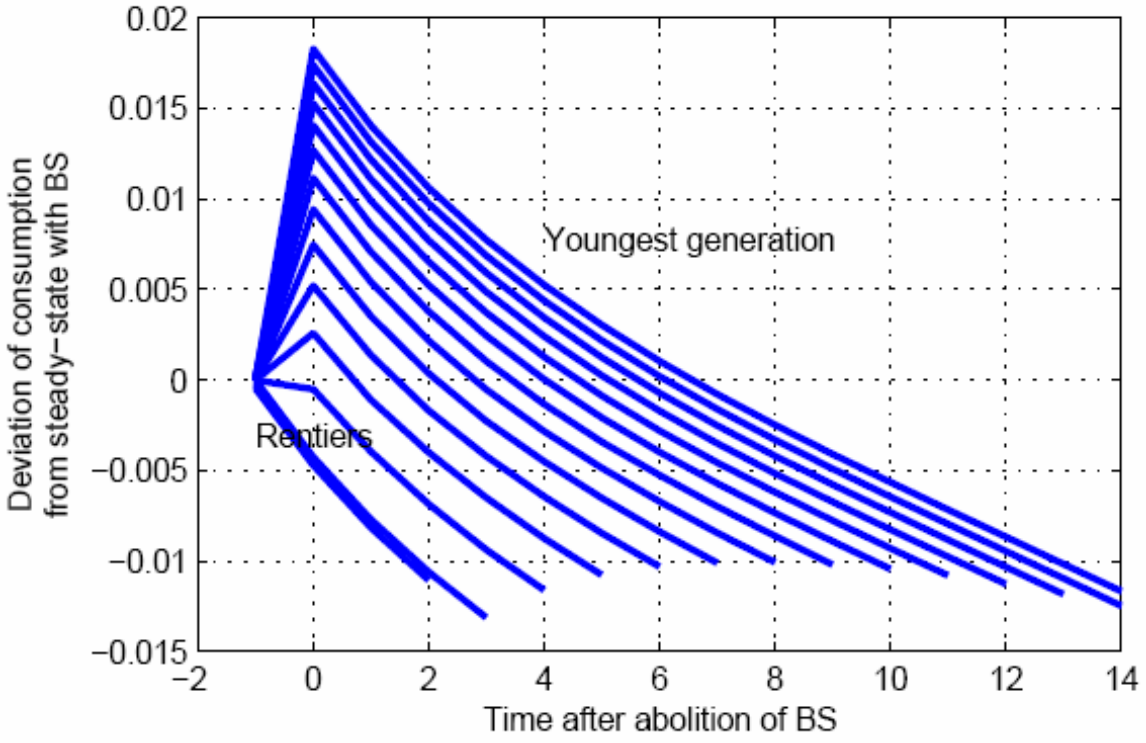
Abolishing bank secrecy in the 16-generation OLG model

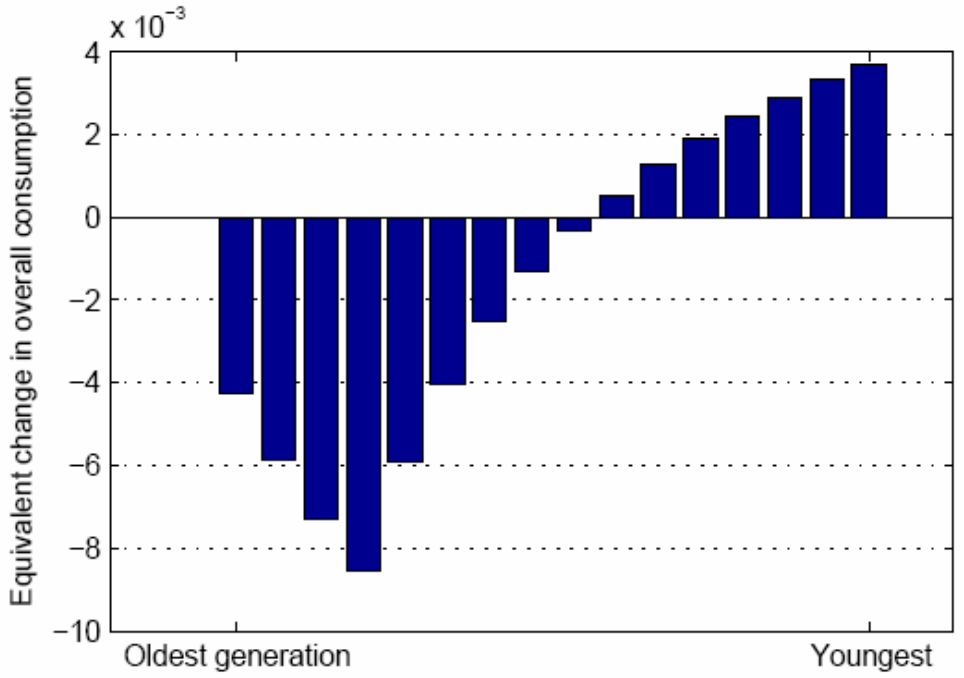
Figure 5: Abolishing banking secrecy: The aggregate perspective



Abolishing bank secrecy in the 16-generation OLG model

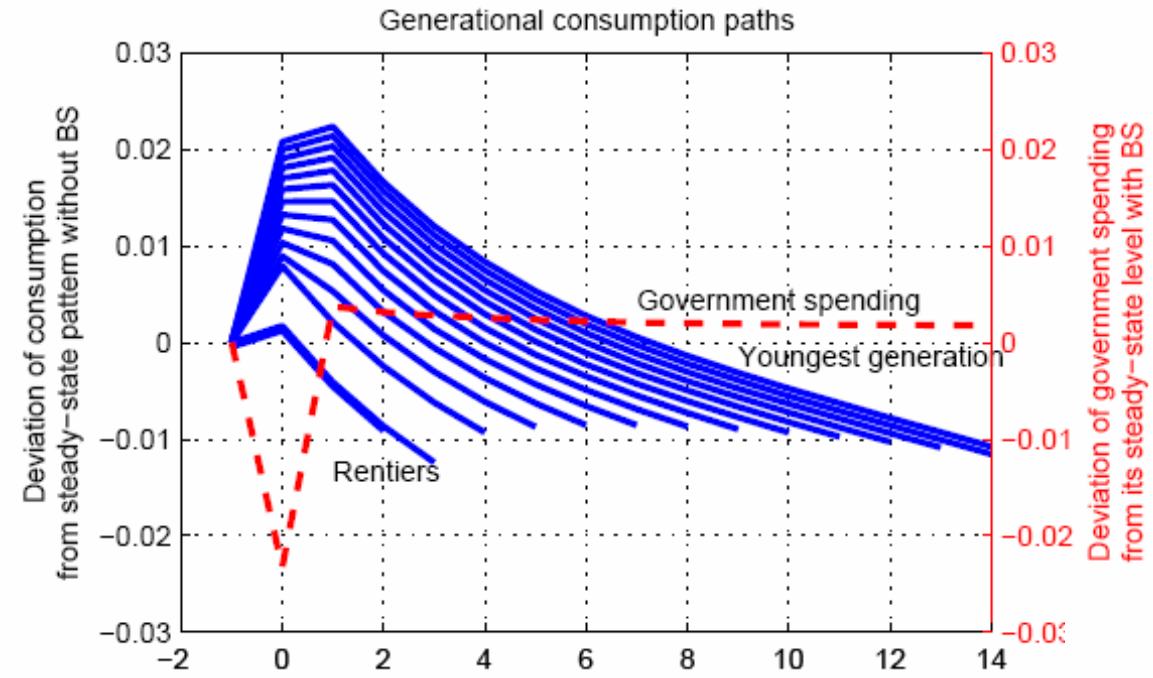
Figure 6: Abolishing banking secrecy: The generational perspective

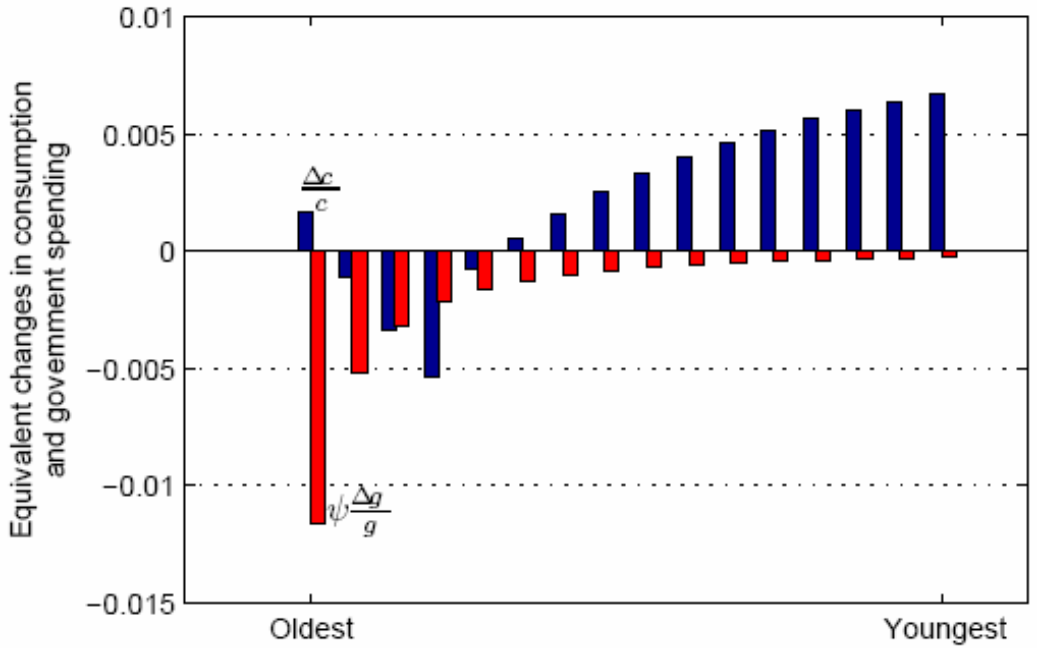




Enter effects on government spending

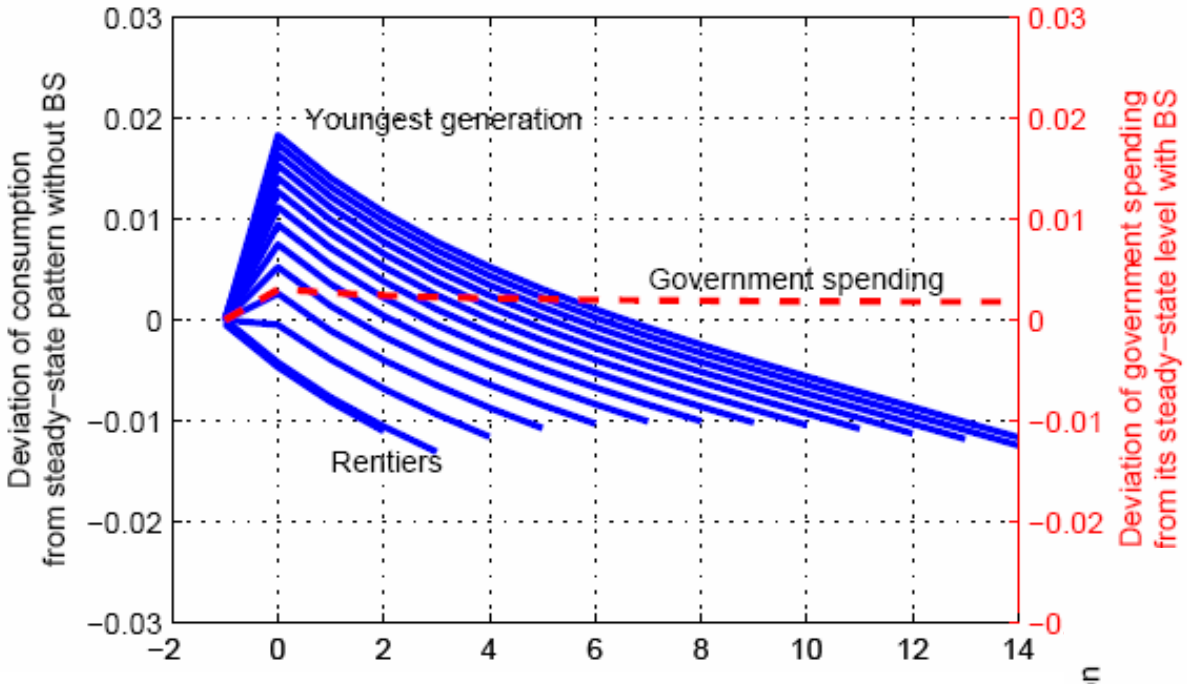
Figure 7: Government spendings effects: Pre-announced abolishment

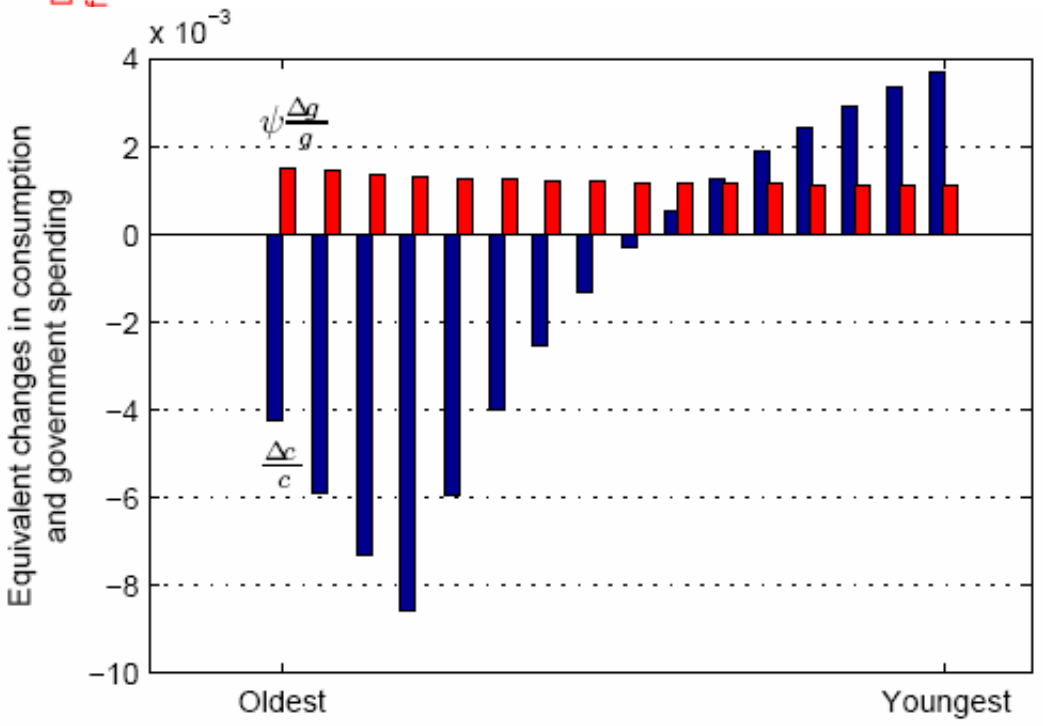




Enter effects on government spending

Figure 8: Government spendings effects: Surprise abolishment





More results

- When taking income tax rates as a measure of government power abuse, **tax evasion feeds Leviathan**. Even when all public spending is forced upon households and does not even feature in their utility function, tax rates go up.
- Since this is accompanied by a dramatically shrinking tax base, however, due to a substantial part of income now being concealed from tax authorities, **taxes per capita do indeed fall**. Households benefit from this through higher consumption.
- Effects on any generation alive when change takes place may differ substantially from steady state effects that accrue for generations yet to be born.
- There is considerable intergenerational diversity in these effects that is not monotonous as we move from young to old.
- Combined, these results suggest that the political economy of pertinent institutional change may be quite complex.