On the Mirrlees Review

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Structural labor supply models

- Microeconomic data allowing to analyze and measure the labor supply reactions to tax and benefits incentives.
- Consider the welfare state as a whole, with full interactions between the various nonlinear tax and benefits (Moffitt (2002)).
- Identification helped by the variations observed in taxes and benefits (Blundell, Duncan, and Meghir (1998)).
- ▶ The choice of a utilitarian government redistributive objective leads to the optimal welfare state design (Adam (2005)).

Going from optimal tax theory to its empirical implementation is not a simple matter.

- ▶ No taxation at the top of the earnings distribution.
- Extensive and intensive margins.
- A lot of heterogeneity.

Pending issues, or themes for further work

- Identification: supply vs. demand; link between micro and macro elasticities.
- Interactions between taxes and benefits.
- Dynamics.

At the borders between taxes and benefits

A number of the cases with very high rates and Laffer inefficiencies occur at the phasing out of benefits. A contribution of the optimal tax analysis is a better design of these transitions and a closer integration of family benefits with the income tax schedule.

Example 1: Lone parent families in the UK: see the main recommendation of Brewer, Saez, and Shephard (2010).

Example 2: Two unskilled parents non working in France: poverty trap.

There has been relatively little work on the endogeneity of status, such as the marriage tax.

Dynamics

A lot of theoretical research on taxation in the past twenty years has dealt with dynamic issues (see Kocherlakota (2010)).

To fix ideas, suppose that the benevolent tax authority has a welfare objective based on the per period expected life time utilities of the participants in the economy:

$$\max E \sum_{t=1}^{T} \tilde{\beta}_{t} u(c_{t}, \ell_{t}, \tilde{\alpha}_{t})$$

$$a_{t} + c_{t} = (1 + \rho_{t}) a_{t-1} + \tilde{\omega}_{t} \ell_{t}$$

$$a_{0} \text{ given.}$$

 $(\tilde{\alpha}, \tilde{\beta}, \tilde{\omega})$ are preference and productivity shocks. The risk free rate of interest is denoted ρ_t .

Static instruments in a dynamic world

The most common instrument is (current) income tax. But current income is a noisy predictor of lifetime utility.

Bovenberg, Hansen, and Sorensen (2008) indicate that a substantial fraction of lifetime social contributions of a tax payer (75% in Denmark in 2002) is redistributed to herself/himself.

One should maximize the appropriate objective (say an expected sum of weighted life cycle, *not* cross section, utilities), given the available set of tax and benefit instruments.

Uncertainty and social insurance

Uncertainty may create too much (precautionary) savings. Interactions with private financial markets.

Under full information, theory yields complicated optimal dynamic tax schemes in general.

Integration of unemployment insurance with retirement insurance: Stiglitz and Yun (2005), Bovenberg and Sorensen (2004).

Welfare accounts

Individual savings, retirement, or welfare accounts (experiments in Singapore): Orszag and Snower (1997).

Useful for insurance, but also for redistribution. Such accounts make the link between the welfare contribution and provision more salient, and therefore reduce the distortion associated with the contribution.

Towards life-cycle redistribution

Let D_t describe the nominal debt that the tax payer has contracted from his fellows citizens. This starts at zero at birth and may become negative or positive over time. The quantity D_t can be updated as follows

$$D_{t+1} = (1 + \rho_t)D_t + B_t,$$

with the term B_t depending on circumstances:

- ▶ when a student borrows to finance his studies, *B*_t is equal to the amount he receives;
- a worker who pays taxes, as well as National Insurance Contributions, sees a fraction of his payments accounted for in a reduction of B_t;
- an unemployed person receiving benefits sees fraction of his receipts accruing in B_t;
- ▶ a retired person with a negative *D* may draw on his accumulated capital.

Then keep the simple shape of the income tax scheme, but let its parameters (the brackets and rates) vary with the level of D_t , i.e. taxes are reduced for people who have contributed a lot in the past.

Pros: reduce distorsions, allow more individual choice in the timing of work life, etc.. This type of development is made possible by the information society.

Cons: Can the government commit? The implementation of actual benefits is very complicated.

Conclusion

- ► The analysis of government transfers based on incentives and information asymmetries, essentially nonexistent forty years ago before James Mirrlees seminal paper, is everywhere in the tax and benefit system.
- Microeconomics databases and the associated econometric techniques allow to better design the welfare state.

Main challenges for the future: integration of taxes and benefits, life-cycle insurance and redistribution.

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