# Discussion of "Income Taxation" <br> by Peter Diamond and Ivan Werning 

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## This paper

- Handbook chapter on income taxation
- Paper:
- methodological contribution how to think about optimal taxation in static and dynamic settings ("a theory of implementation")
- overview of some of the main insights from dynamic tax literature


## My plan

- Overview of the literature
- Discuss successes and challenges, directions of further research
- My suggestions for the draft along the way


## Starting point

- Starting point - Mirrlees (1971)
- Main assumptions
- static model
- heterogeneous individuals with unobservable abilities
- Main question
- how to find optimal income tax that maximizes some social welfare function?


## Policy implications

- A lot of progress in recent years in understanding the implications of this model (Diamond, Saez, Piketty, etc)
- Tight characterization of optimal taxes as a function of elasticities, distribution of underlying heterogeneity, other parameters
- Main "policy" results
- optimal taxes are progressive and large for high income individuals (under some assumptions on elasticities and distribution of skills in the tail of the distribution)
- optimal subsidies for low income individuals (under some assumptions on extensive margin and participation decisions)


## Limitations of the static set up

- Conceptually, static model is a natural starting point
- Empirically, static model is a bad model for describing behavior of individuals
- individuals save, accumulate human capital, react to deterministic and stochastic shocks
- static model does not distinguish between people in different stages of lifecycle, between permanent and transitory shocks
- It is not clear how to map results of the static model into dynamic reality
- should we think of life-time or annual income?
- what to do about savings?
- what are the implications of human capital accumulation, occupational choice, etc for optimal taxation?
- Current policy implications are largely derived by ignoring this issues and using estimates of the short-run elasticity of hours as a crucial parameter for the determination of the effect of taxes.


## Important progress in labor literature

- In the past 20 years there has been an explosion of studies of panel micro data in labor literature
- both "micro labor" (Attanasio, Weber, Pistaferri, Deaton, Blundell, Meghir) and "macro labor" (Violante, Rios-Rull, Guvenen, Kruger, Storesletten, Parker, Seshadri) built models that capture well individual's consumption, labor and savings decisions.
- The key challenge: how to use the insights from this empirical research to understand how to design optimal taxes and social insurance programs


## How to think about policy in realistic settings?

- In static models, one can tax only one object, labor income, and hence there is only one instrument one can use, labor income tax
- in fact, one can also tax consumption, but let's ignore this
- In realistic dynamic settings there are many objects one can tax (labor, capital) as a function of many characteristics (age, past history of earnings, etc)
- How to find the optimal taxes?


## Two approaches

- Conceptually, there are two starting points
(1) Start with fully optimal taxes by writing a mechanism design problem and finding the implications for the decentralization ex-post
- pros: achieves the highest welfare, often easiest to solve
- cons: fully optimal schedules can often be complicated
(2) Start with a specific form of tax/social security program (e.g. taxes depend only on today's income)
- pros: the form of the optimal tax is easy to understand
- cons: do not know which features are most important for taxes, often hard to solve for realistic models
- NDPF strategy: start with the fully optimal system, understand which features are most important, use that to find simple tax system that approximate full optimum the best
- would be helpful to spell this out more clearly in the first part of the paper


## Policy implications

- Dynamic optimal tax models give new insights and challenge the old ones
- The authors discuss some of them
- optimality of the positive savings tax (Diamond-Mirrlees, Golosov-Kocherlakota-Tsyvinski)
- smoothing of tax distortions over time (Farhi-Werning)
- I encourage the authors to expand this discussion
- the optimal taxes on labor income are often much lower than in static settings (Golosov-Troshkin-Tsyvinski)
- taxation of capital for entrepreneurs (Albanesi, Shouredih)
- implications of human capital accumulation (Grochulski-Piskorski, Kapicka, da Costa)
- analysis of the taxation of bequests (Cremer-Pestieau, Farhi-Werning)


## Bringing theoretical models to the data

- Current draft focuses on the qualitative implications
- A lot of recent work that brings static and dynamic literature to the data and derives quantitative predictions
- I think it would be helpful to discuss those in the paper
- ultimately we care not that much about whether the optimal tax is "positive" or "progressive" but how big it is
- recent quantitative literature showed that some of the qualitative insights have miniscule effect on welfare


## Role of the government

- Traditional analysis assumes that all social insurance should be provided by the government
- what about crowding out private insurance markets?
- What are the reasons for non-existences of some markets?
- different forms of market failures lead to different normative implications
- What are the optimal arrangements when markets fail?
- e.g. if we believe that some individuals are myopic and do not save enough for retirement, why not design social security system that separates myopic and non-myopic consumers?


## Summary of my suggestions to the authors

- Spell out more explicitly methodological approaches of the optimal tax literature
- Expand the section that discusses insights that come out of tax models
- Discuss empirical and quantitative implications

