Discussion of "Market Power and Income Taxation" by L. Kaplow and "Generalized Compensation Principle" by A. Tsyvinski and N. Werquin

Antoine Ferey
Ecole Polytechnique, CREST

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Market Power and Income Taxation

• **Question:** Does market power interact with income taxation?
  • Do the induced rents affect optimal income taxation problem?
  • Do redistributive concerns affect market power regulations?

• **Set-up:** Non-linear income tax $T(y)$ with aggregate profits $\Pi$
  • Heterogeneous earnings ability $w \leftrightarrow y$
  • Multiple goods sold with markup $p_i = c_i + \mu_i$
  • Profit ownership as a function of income $\theta(y)$

$\Rightarrow$ Atkinson, Stiglitz (1976) economy where $\mu_i$ replaces $t_i$
1. Provide *equivalence result*
   - If markups are proportional $\frac{\mu_i}{p_i} \equiv \lambda_i = \lambda$, the economy $E$ is equivalent to economy $\hat{E}$ without markups
     \[ \hat{T}(y) = (1 - \lambda)T(y) + \lambda y - (1 - \lambda)\theta(y)\Pi \]

2. Consider *changes in markups* with *compensating tax reform*
   - Marginal decrease in markup $\mu_i$ with a compensating tax reform is Pareto-improving if and only if markup is high $\lambda_i > \bar{\lambda}_{-i}$

3. Robust to markups covering real resource costs, up to adjustments in ability distribution and above inequality

$\Rightarrow$ **Redistribution and market regulation can be separated**
   1. Equivalence: redistribution problem is independent of profits
   2. Compensation: market regulation guided by total surplus test
Discussion

- Simple and elegant contribution on very topical issue
  - Important benchmark, yet many open questions

- Simplicity requires a number of assumptions
  - Separable preferences
  - One-dimensional heterogeneity
  - Implicit *unconstrained ability to tax profits* (profit taxes?)

- Natural extension: commodity taxes $p_i = c_i + \mu_i + t_i$
  - Uniform commodity taxes to reduce relative distortions?
  - Higher commodity taxes on more competitive sectors?
  - Is reducing market power then always beneficial?

- Exogenous markups and market power: impact of endogenous market structure and *general equilibrium* effects?
Generalized Compensation Principle

• **Question:** Is it possible to design a tax reform that compensates the welfare impacts of an arbitrary economic disruption?
  - Wage disruption: technological change or immigration inflow

• **Set-up:** General equilibrium setting with distortionary taxes
  - Endogenous wages $w_i$
  - Heterogeneous earnings ability $\theta_i$ [labor supply]
  - General production function $F$ [labor demand]
  - Non-linear income tax $T(y)$

• **Difficulty:** Infinitely many feedback effects
  - Disruption $\implies$ 1st compensation $\implies$ 2nd compensation ...
Paper & Take-Away

1. Compensation in **partial equilibrium** in simple model
   - No feedback, first compensation adjusts average tax rates
   - Associated changes in marginal tax rates yields impact on budget

2. Compensation in **general equilibrium** in simple model
   - Fixed-point solves jointly for all average and marginal tax rates
   - System of *Integro-Differential Algebraic Equations* (IDAE)

3. Compensation in general equilibrium in **general model**
   - General utility function, extensive margin of labor supply
   - General production function with capital and capital income taxes

   ➞ **Always possible to compensate economic disruptions**
   - Paper characterizes compensation and its budget impact

4. Application: compensation of **automation** in US and Germany
Discussion

- Major contribution to **General Equilibrium Public Finance**
  - Why now? Recent mathematical tools (2006 IDAE textbook)
  - Amazingly crafted: very technical and yet very intuitive

- General model relaxes all assumptions but
  - Competitive labor and goods market
  - One-dimensional heterogeneity
  - Marginal economic disruptions

- Minor clarification: properties of $\hat{T}(y)$ and $\hat{T}'(y)$?
  - Is continuity of $\hat{T}(y)$ and $\hat{T}'(y)$ ensured in compensation?
Compensating variation is an interesting approach
• Constructive: full closed-form analytical solutions
• Policy-relevant: based on actual distributions and elasticities

Compensating variation orthogonal to gov’t objective
• Characterizes how compensation can be done and its cost

Can be applied to tackle many questions involving redistribution without relying on any particular social welfare function
• Market regulation, labor market policies, political economy ...

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