

University of Toronto
Economics 336Y – Public Economics (Taxation)

Final examination
April 4, 2005

Part A. Answer SEVEN of the following questions. For each question you choose, indicate whether the statement is TRUE, FALSE, or UNCERTAIN. Justify your answer, and DEFINE EACH OF THE TERMS IN ITALICS. (12 points each.)

1. Some right-wing politicians want to abolish the personal income tax and replace it by a tax on consumption and bequests. But this system would exempt capital income and, because those with capital income are richer on average, this would reduce *vertical equity*.
2. It would be possible to institute a *flat-rate income tax* while preserving *average rate progressivity* in the tax system.
3. A conventional welfare program offers recipients a fixed monthly payment, which is reduced by the full amount of the recipient's own labour earnings. Replacing conventional welfare with a *negative income tax* with the same fiscal cost would increase total labour supply and reduce deadweight loss in the economy, while leaving equity unchanged. Justify your answer, and cite empirical evidence where possible.
4. The *dividend puzzle* can be explained by the fact that some investors prefer receiving regular cash income from their investments. (In your answer, consider alternative strategies that corporations and investors might adopt.)
5. During the 1980s, the rate of national saving in Canada was substantially higher than in the United States. This difference can be explained satisfactorily by differences in the two countries' *retirement income systems*. Explain and contrast the arguments of Carroll and Summers (1987) and Sabelhaus (1997) on this issue.
6. Consider a tax on capital employed by firms in a *small, open economy*, which is paid to domestic workers as a lump-sum transfer. This tax decreases the level of national income, but it redistributes income from domestic savers to domestic workers.
7. Our personal income tax system subsidizes housing consumption, because it fails to tax *imputed income of homeowners*. This is desirable according to the *Corlett-Hague principle of optimal taxation*.
8. Depending on the source of investment finance, Canada's corporate income tax system might cause firms' *user cost of capital* to rise, fall, or remain unchanged, compared to a *business cash flow tax*.

Exam continues overleaf...

Part B. Answer ONE of the following questions. Show your calculations for partial credit in case of wrong answers. (16 points.)

9. An individual lives for two periods, earns (after-tax) income Y_1 in the first period and is retired in the second period. She saves $S = Y_1 - C_1$ for her retirement at a pre-tax interest rate r but interest income is taxed at rate t . If her utility function is $U(C_1, C_2) = \log C_1 + \log C_2$, calculate her optimal savings S^* as a function of r, t and Y_1 . Does the tax on savings have a positive deadweight loss? Explain why or why not?
10. Since 1997, the tax rate paid by high-income taxpayers in Ontario has fallen from 50% to 45%, whereas the corresponding rate in Quebec has risen from 50% to 55%. Statistics show that, over the same period, average taxable income of high-income taxpayers has risen 5% in Quebec and 15% in Ontario. Using the methodology of Feldstein (1995), calculate the simple difference-in-difference estimate of the elasticity of taxable income $\epsilon = \Delta\%Y / \Delta\%(1 - t)$ (where $\Delta\%X$ means "percentage change in X "). Name two econometric problems that might lead to a bias in this estimator.