

YORK UNIVERSITY Faculty of Arts

Final Examination December 11, 2004

Economics 4070.03AF : Public Finance I S. Bucovetsky

time=2 hours

The exam contains two sections, *A* and *B*. Section *A* is worth 40 % of the marks, section *B* 60 %. Note that there is some choice in each section.

A : 40 % (5 % per question)

Explain **briefly** the significance for the economics of taxation of any **8** of the following 10 terms.

1. backwards shifting of an excise tax
2. excess burden
3. equi-proportional Ramsey rule
4. dynamic inconsistency of a capital tax
5. realization of capital gains
6. negative income tax
7. deductability of mortgage interest
8. clawback of benefits
9. straight line depreciation
10. cash flow tax

continued

B : 60 % (15 % per question)

Answer any 4 of the following 8 questions.

1. Discuss the incidence of a tax on the use of labour in some industry, if the industry were relatively labour intensive, compared with other industries in which the tax was not levied.

2. If a person consumes only food and clothing, calculate the excess burden of a \$3 unit tax on her clothing consumption, if her preferences can be represented by the utility function

$$U(f, c) = 10 + f - \frac{64}{c}$$

where c is her consumption of clothing, and f her consumption of food, if the net-of-tax prices of food and clothing are constant, and equal to \$1 each, and if the person's income is 30.

3. How would the choice of social welfare function affect the optimal income tax rate, if people's income was unaffected by the tax system?

4. What would be the consequences for economic efficiency of taxing capital gains on an accrual basis, rather than when they are realized?

continued

5. How does the effective marginal tax rate vary with the taxpayer's income, for a taxpayer with one child, under an (imaginary) income tax system with the following rules? :

- the basic tax rate is 20 percent
- each individual gets a **non-refundable** tax credit of \$10000
- there is a **non-refundable** tax credit of \$5000 for each dependent child
- if the taxpayer's income is greater than \$60,000, then the child tax credit is reduced by 25 cents for each dollar of income in excess of \$60,000
- the child tax credit cannot be negative
- all income over \$100,000 is subject to a surtax, equal to 10 percent of any income in excess of \$100,000

6. How would a tax of 60 percent on the return to saving affect the amount saved by a person who earned (exogenous) income Y_p of 600 when young, earned no income when old, faced a before-tax return to saving of 50 percent, and had preferences over current consumption C_p and future consumption C_f which could be represented by the utility function

$$U(C_p, C_f) = 300 \ln C_p + C_f \quad ?$$

7. How would an increase in the corporate income tax rate affect a firm's investment decision, if it financed investment out of its retained earnings, and if depreciation allowances in the tax code corresponded to actual economic depreciation of assets?

8. Explain briefly the different methods of treating the income of wholly-owned foreign subsidiaries of multinational corporations, in the corporate income tax.

the end