Practical Session VII – Fall 2020

Education

1. State and federal governments actively support education at the primary, secondary, and collegiate levels. But they mandate education at the primary and secondary levels, while merely providing subsidies and loan guarantees at the collegiate level. Of the key rationales for public provision of education, which do you think underpins this differential treatment?

2. Suppose that a family with one child has \$20,000 per year to spend on private goods and education, and further suppose that all education is privately provided.

- i. Draw this family's budget constraint.
- ii. Suppose now that an option of free public education with spending of \$4,000 per pupil is introduced to this family. Draw three different indifference curves corresponding to the following three situations:
- a) free public education would increase the amount of money that is spent on the child's education;
- b) free public education would decrease the amount of money that is spent on the child's education;
- c) free public education would not affect the amount of money spent on the child's education.

3. The town of Greenville has three families, each with one child, and each of which earns \$20,000 per year (pre-tax). Each family is taxed \$4,000 per year to finance the public school system in the town, which any family can then freely attend. Education spending is \$6,000 per student in the public schools. The three families differ in their preferences for education. Though families A and B both send their children to the public school, family B places a greater value on education than family A. Family C places the greatest relative value on education and sends their child to private school.

i) Graph the budget constraints facing each of the three families, and draw a possible indifference curve that could correspond to the choice each family makes.

The town is considering replacing its current system with a voucher system. Under the new system, each family would receive a \$6,000 voucher for education, and families would still be able to send their children to the same public school. Since this would be more costly than the current system, they would also raise taxes to \$6,000 per household to pay for it.

ii) Draw the budget constraint the families would face under this system.

Suppose that when the new system is introduced, family A continues to send their child to public school, but family B now sends their child to private school (along with family C's child).

iii) Explain how you know that family C is made better off and family A is made worse off by the voucher policy.

iv) Show, using diagrams, that family B could be made better or worse off by the voucher policy.

4. Several researchers have found evidence of sheepskin effects in which the labour market return to twelfth grade is higher than the return to eleventh grade and the return to the fourth year of college is higher than the return to the third year of college. Why does this evidence of sheepskin effects bolster the screening explanation for the relationship between education and earnings?