Education

Lectures 11 and 12

Le Grand, Propper and Smith (2008): Chp 3
Bochel, Bochel, Page and Sykes (2009): Chp 11
Stiglitz (2000): Chp 16
Outline

• Social objectives of education
  – efficiency
  – equity

• Education and the market system

• Forms of Govt intervention

• Education Reforms
Education and Resource Allocation

• Education and Efficiency
  - Maximise net social benefit

• Measuring education benefits
  1. Production benefits
     - Investment and future productivity
  2. Socialisation benefits
     - Transmission of knowledge
     - Socialisation function v home education

Education and Equity

- Equitable distribution

- Definition of Equity
  1. Minimum level
  2. Equal access
  3. Equality of opportunity
Education and the Market System

• Investment in human capital
  – Costs v future returns

• Education costs
  – Direct costs
  – Opportunity cost of income foregone

• Education as an Inv decision
  – eg university education
  – Costs: areas A + B
  – Benefits: area C
    ⇒ if NPB is positive, invest in human capital

Figure 1  **Time Profile of Cost and Benefit Flows**
Education and the Market System (contd)

- If returns to education are high
  ⇒ Students: willing and able to finance studies and repay later

- Advantages of the market system
  - Preferences and choice
  - Availability of efficient education system

- Why govt assistance?

- Education and inefficiency
  - Imperfect information
  - Externalities
Education and the Market System I: Imperfect Information

• 1. Supply-side: borrowing requirements
  – Low-income groups, no collateral
    ⇒ high-risk premium favours the well-off
  – adverse selection problem
    ⇒ lending is inefficiently low

• 2. Demand-side: decision-making
  – A complex process
    ⇒ under-estimate the value of education and over-estimate the costs
    ⇒ debt-aversion to financing education

• Education determines job prospects & quality of life
  ⇒ minimise potential for individual mistakes
Education and the Market System II: External Benefits

• Total social benefit = private benefits + external benefits
  ⇒ Market provision is inefficient

• 1. Economic benefits
  – Employment benefits: co-operation and overall productivity
    eg efficient management and supervision
  – Production benefits: technological progress and growth
  – eg flexibility and adaptability

• 2. Non-economic benefits
  – Socialisation function

• How to measure external benefits?
Higher Education (HE) and Signalling

• How to distinguish productive v unproductive workers?

• Screening hypothesis
  – HE is a proxy for innate skills and abilities

• a. Strong form
  – HE has no effect on individual productivity
  – A signal to employer that the individual is productive

• b. Weak form
  – Skilled individuals invest in HE to ↑ appeal to employers
  – HE raises individual productivity; social returns > private returns

⇒ HE is merely a signal of ability
⇒ Govt intervention questionable
Education and the Market System III: Equity

• Non-investment in education is a rational decision
  – Low-income households
  – Credit-constrained and inability to borrow
  – Less knowledgeable of future benefits
  ⇒ Perpetuated across generations

⇒ Govt intervention: equity and efficiency goals
  – Compulsory education
  – Higher education
Govt Policy: Compulsory Education Reforms

• UK system 1945-1990
  - Finance education from general taxation.
  - Provide education free of charge
  - Limited private education

• Reforms
  - Maintain free education
  - Individual choice, reward school numbers, public information

• 1. Quasi-markets
  - Open enrolment
  - Following the pupil
  - School performance is public information

• 2. Education voucher
  - Entitles an individual to pay for a given quantity of education services
  - Schools redeem vouchers from the govt for a cash sum
Compulsory Education Reforms: Issues

• 1. School choice and school behaviour
  – Exam performance, league tables and ‘gaming the system’
    ...but broader educational goals
    ...and incentives to massage the data
  – Policy: contextual value added

• 2. School choice and efficiency
  – Supply side flexibility
  – Financial implications of student numbers
  – Policy: lottery scheme to prevent over-subscribed popular schools

• 3. School choice and equity
  – Low-income families: quality and duration of education
Govt Policy: Higher Education (HE)

• Link between education and growth?
• Substantial private returns
• Variable govt intervention

1. Traditional model of state provision and state funding
   - Public sector universities
   - Entrance exam
   - Free of charge
   - Student grants

2. Cost-sharing
   - Costs of provision
   - High private returns
   - Market incentives for providers
Financing HE I: Grants

• UK attendance in HE relatively low but increasing

• Free education & non-repayable maintenance grant

• In favour of grants
  – equalise access
  …but in reality: favours the well-off

• Against grants
  – unrelated to cost of study
  – unrelated to future income
  – stage of education v EMA
Financing HE II: Loans

• Loans system
  – Recipient bears the costs and re-distributes the burden over time

• In favour of loans
  – equity: repayable loans reduce lifetime income inequality
  – efficiency: private costs and student responsibility

• Against loans
  – 1. lower appeal of low-paid jobs
    ⇒ Response: income contingent loans at subsidised or zero interest rate
  – 2. inequality of access v consumption expenditure
    ⇒ Response: income contingent loans
    ⇒ Additional targeted policies eg maintenance grant or write off loans in low-paid jobs or loan remission
  – 3. govt exp unreleased for alternative uses for many years
Financing HE III: Graduate Taxes

- Extra tax paid over entire working life if complete education

- In favour of graduate tax
  - As with loans, recipient pays tax v grants (all taxpayers)
  - Cheaper to administer v loans
  - Related to future income v grants

- Against graduate tax
  - Unrelated to cost of study
  - Disincentives to work

⇒ economic efficiency: loans are preferred
Provision of HE: Reforms

• Regulation of prices charged by HE universities

• 1. Fee charging in the UK since 1998
  – Same fee for all subjects and Universities until 2003
  – Promotes equality of access
    ...but incentives to improve standards?

• Market reform and efficiency
  – Free(er) to set own fees: price signals
  – Demand-side: allocation of resources between courses
  – Supply-side: improved standards v flat fees: price ceiling or price floor

• 2. Variable fees
  – Universities differ in quality
  – Equity concerns: scholarships to be widespread and generous
Summary

• Efficiency: productivity and social benefits

• Equity: minimum standard and equality of access

• Markets: increase choice
  – ...but imperfect information and externalities impede efficiency aim
  – ...inability to pay and unequal distribution impede equity aim

• Dissatisfaction with traditional provision and subsidies

• Policy response: combine equity goals & market mechanisms
  – Compulsory education: lottery and student voucher
  – HE: student loans and targeted grants