Distributional Impact of Fiscal Policy

In-Kind Benefits: Food, Health, Education

Ian Preston

University College London and Institute for Fiscal Studies

10th June 2013
The World Bank

Institute for Fiscal Studies

Summary

- What is best practice in identifying economic incidence of in kind transfers?
  - Cost of provision or private value?
- In kind education provision
  - Nature of benefits
  - Conceptual issues
  - Evidence

Summary

- What is best practice in identifying economic incidence of in kind transfers?
  - Cost of provision or private value?
- In kind education provision
  - Nature of benefits
  - Conceptual issues
  - Evidence

Cost of provision or private value

- Most frequent method takes cost of provision and allocates by use
  - Justified by feasibility more than theoretical attractiveness
  - Should be aware of possible distortions introduced
- Aim should be to evaluate impact of government provision on welfare in a way that can be combined with analysis of effect of cash transfers
- Cost of provision is relevant because of the need to finance this cost but this is captured in associated tax payments
- The ideal measure of benefit should be the equivalent monetary value of the service to the recipient

Cost of provision or private value

- Most frequent method takes cost of provision and allocates by use
  - Justified by feasibility more than theoretical attractiveness
  - Should be aware of possible distortions introduced
- Aim should be to evaluate impact of government provision on welfare in a way that can be combined with analysis of effect of cash transfers
- Cost of provision is relevant because of the need to finance this cost but this is captured in associated tax payments
- The ideal measure of benefit should be the equivalent monetary value of the service to the recipient

Problems with using cost

- Evaluating by cost obviously goes wrong if the service provided is actually harmful
- Democratic processes should be expected to ensure typically beneficial provision
- Benefits and costs arguably linked in aggregate by rational policy making
- However distribution of willingness to pay and costs of provision may be weakly correlated

An example where use of cost gets it right

- Suppose a good is privately provided and
  - demands are proportional to income
  - the good is competitively provided at constant marginal and average cost
- The government takes over provision and
  - provides the same quantities, proportional to income
  - funds provision by proportional tax payments
- Government provision has no effect on welfare
- Evaluation according to cost allocated by use is exactly right

An example where use of cost gets it right

- Suppose a good is privately provided and
  - demands are proportional to income
  - the good is competitively provided at constant marginal and average cost
- The government takes over provision and
  - provides the same quantities, proportional to income
  - funds provision by proportional tax payments
- Government provision has no effect on welfare
- Evaluation according to cost allocated by use is exactly right

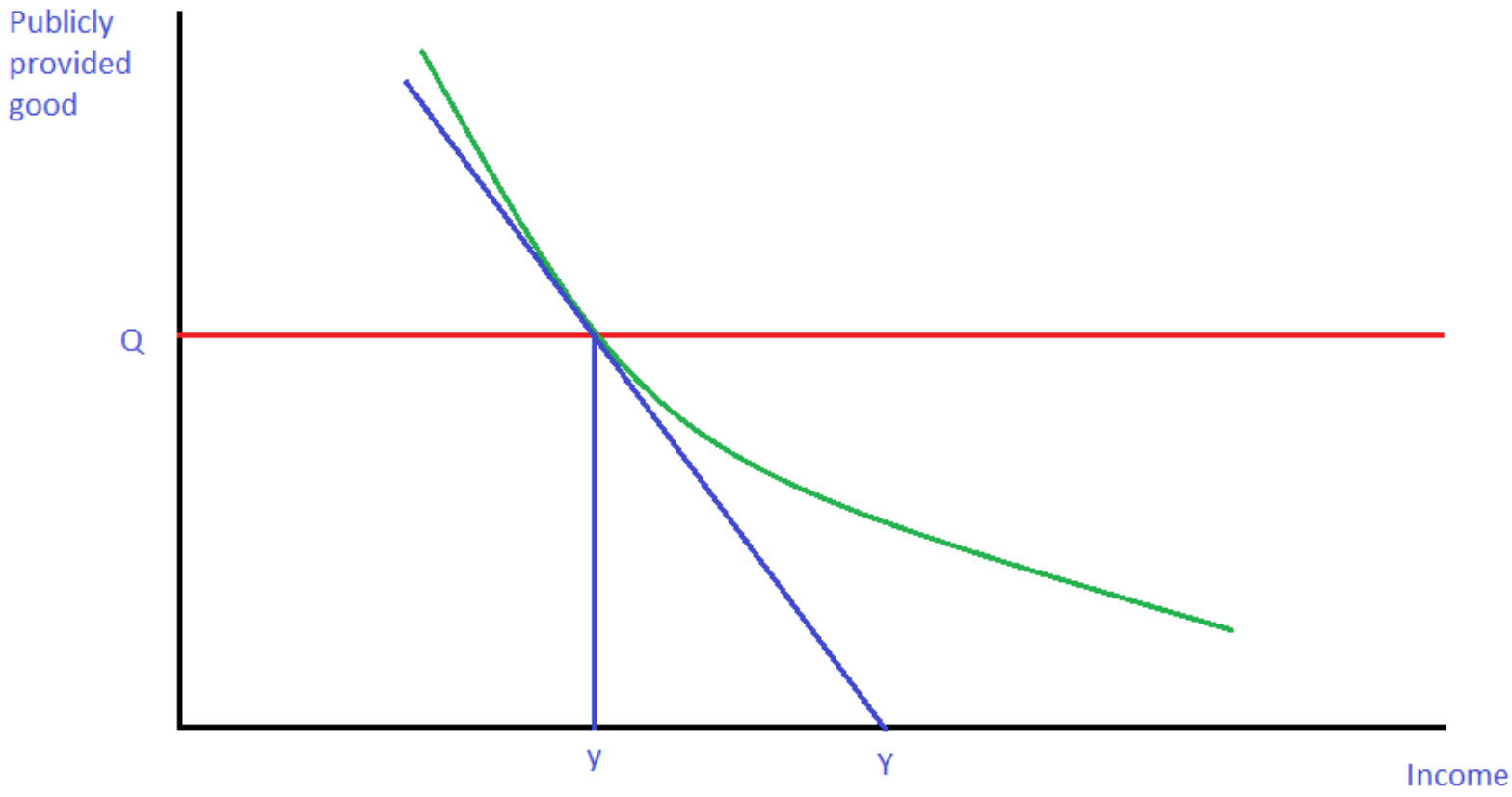
An example where use of cost gets it right

- Suppose a good is privately provided and
  - demands are proportional to income
  - the good is competitively provided at constant marginal and average cost
- The government takes over provision and
  - provides the same quantities, proportional to income
  - funds provision by proportional tax payments
- Government provision has no effect on welfare
- Evaluation according to cost allocated by use is exactly right

An example where use of cost gets it right

- Suppose a good is privately provided and
  - demands are proportional to income
  - the good is competitively provided at constant marginal and average cost
- The government takes over provision and
  - provides the same quantities, proportional to income
  - funds provision by proportional tax payments
- Government provision has no effect on welfare
- Evaluation according to cost allocated by use is exactly right

Private value: publicly-provided *private* good



Institute for Fiscal Studies

How use of cost could get it wrong

- Suppose now that government provision is equalised
  - everyone receives mean provision
  - if we like, assume now funded through a uniform lump sum tax
- Everyone except the mean recipient is worse off
- Total cost now exceeds total benefit
- The distribution is not captured by the distribution of use

How use of cost could get it wrong

- Suppose now that government provision is equalised
  - everyone receives mean provision
  - if we like, assume now funded through a uniform lump sum tax
- Everyone except the mean recipient is worse off
- Total cost now exceeds total benefit
- The distribution is not captured by the distribution of use

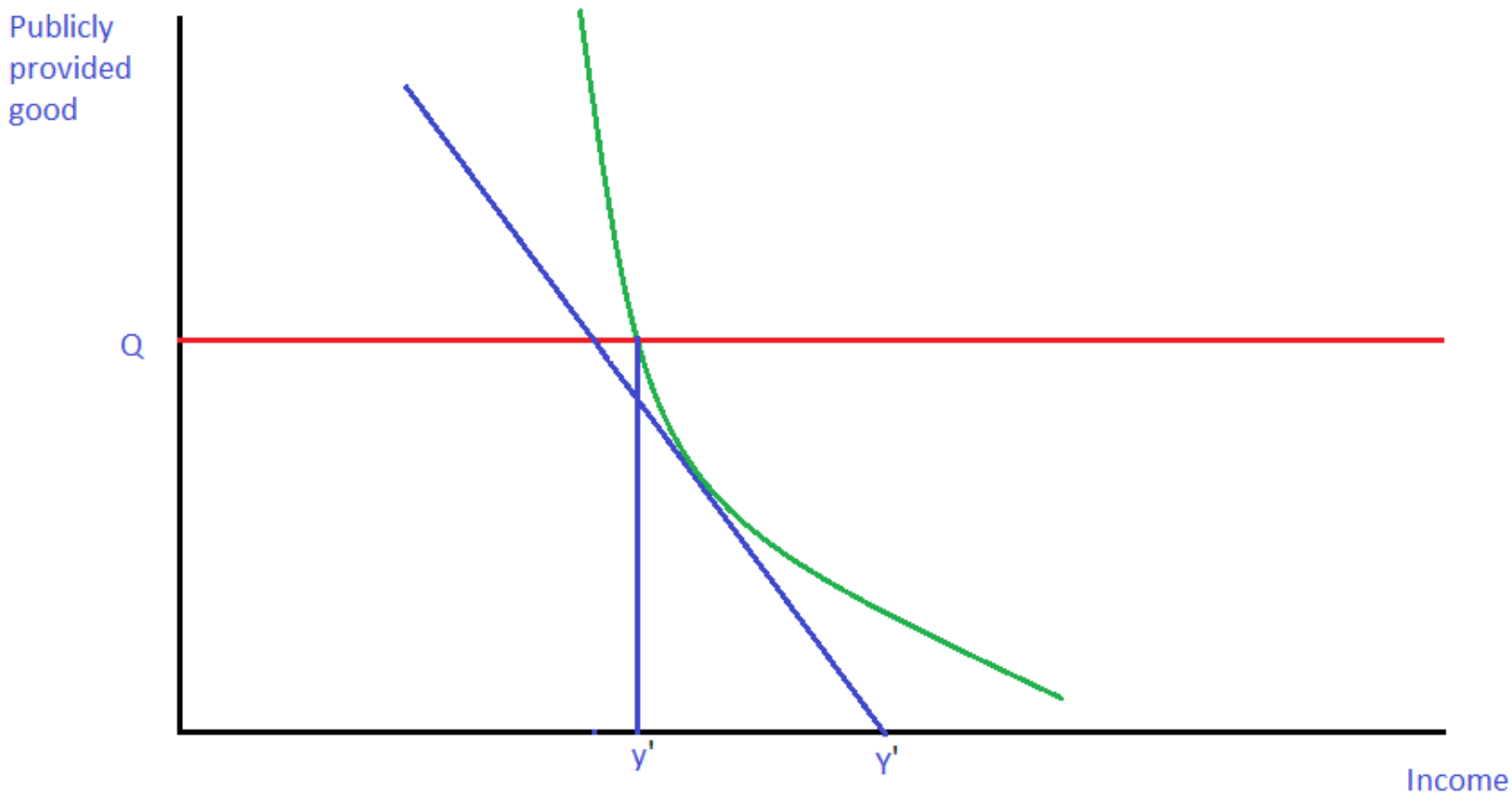
How use of cost could get it wrong

- Suppose now that government provision is equalised
  - everyone receives mean provision
  - if we like, assume now funded through a uniform lump sum tax
- Everyone except the mean recipient is worse off
- Total cost now exceeds total benefit
- The distribution is not captured by the distribution of use

How use of cost could get it wrong

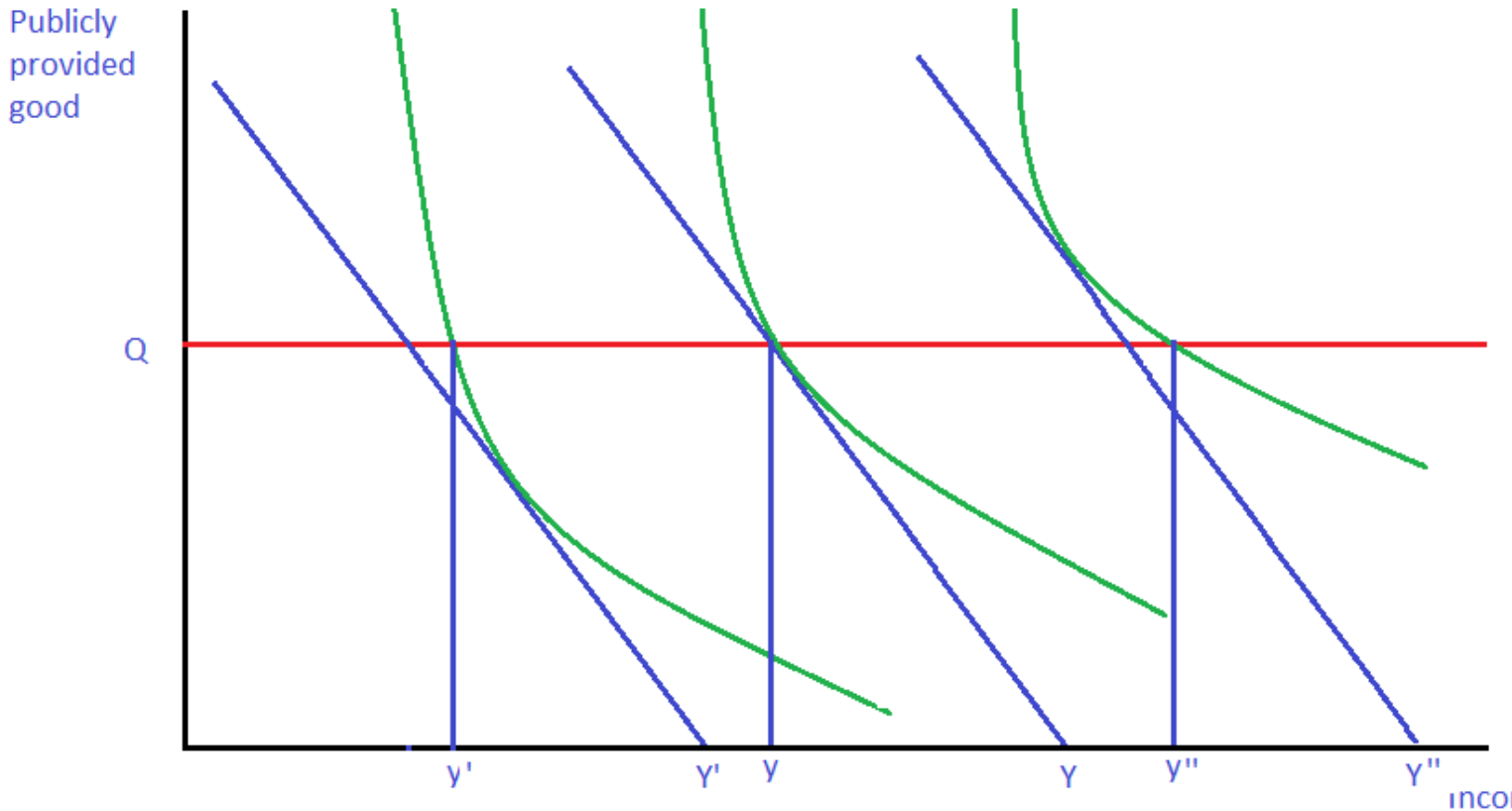
- Suppose now that government provision is equalised
  - everyone receives mean provision
  - if we like, assume now funded through a uniform lump sum tax
- Everyone except the mean recipient is worse off
- Total cost now exceeds total benefit
- The distribution is not captured by the distribution of use

Private value: publicly-provided *private* good



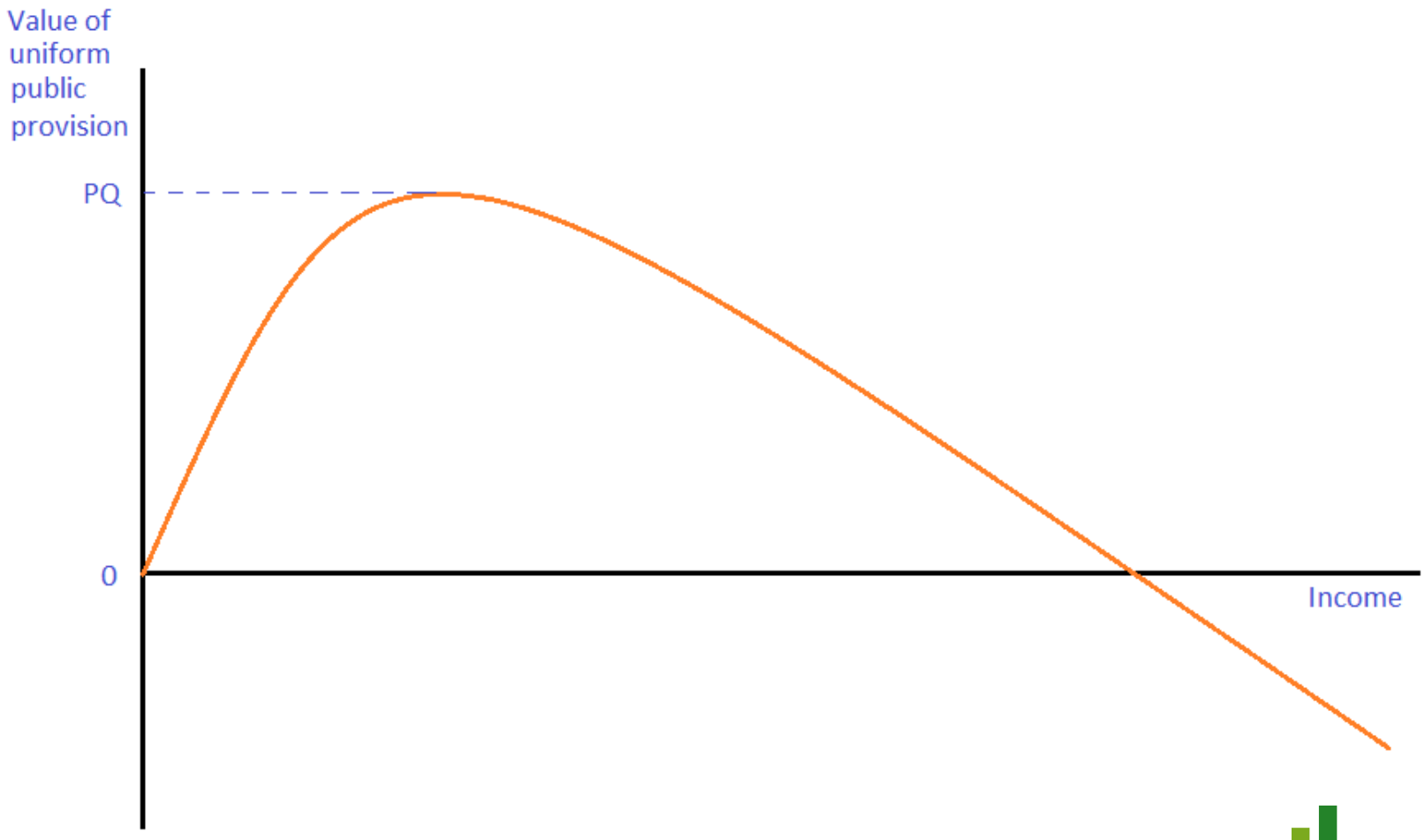
Institute for Fiscal Studies

Distribution of private values: publicly-provided *private* goods



Institute for Fiscal Studies

Private values as a function of income: publicly-provided *private* goods

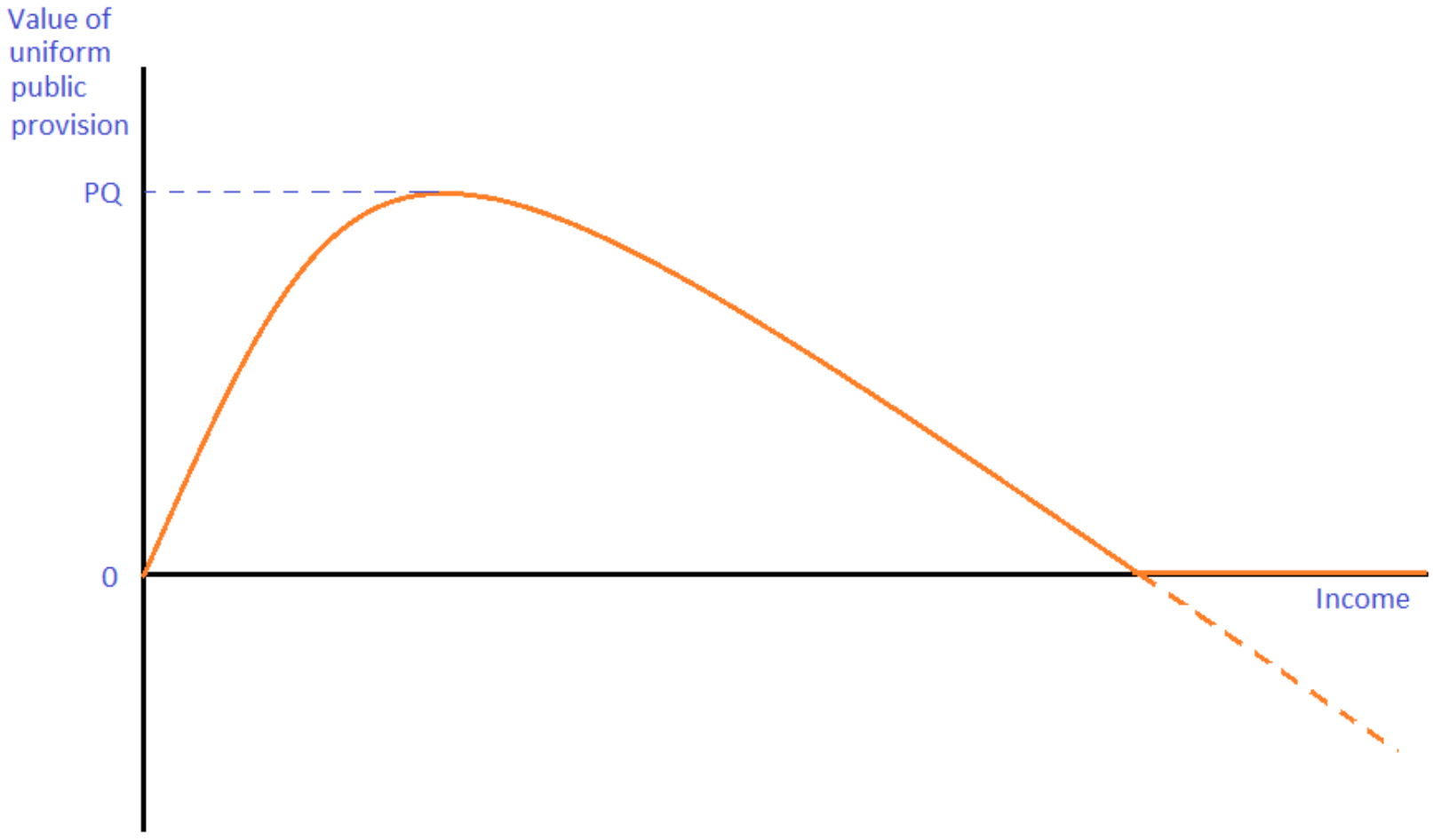


Institute for Fiscal Studies

Public provision of private goods: opting out

- If individuals can opt out
  - richer households for whom value would otherwise be negative will choose to consume privately instead

Publicly-provided *private* goods: opting out



Institute for Fiscal Studies

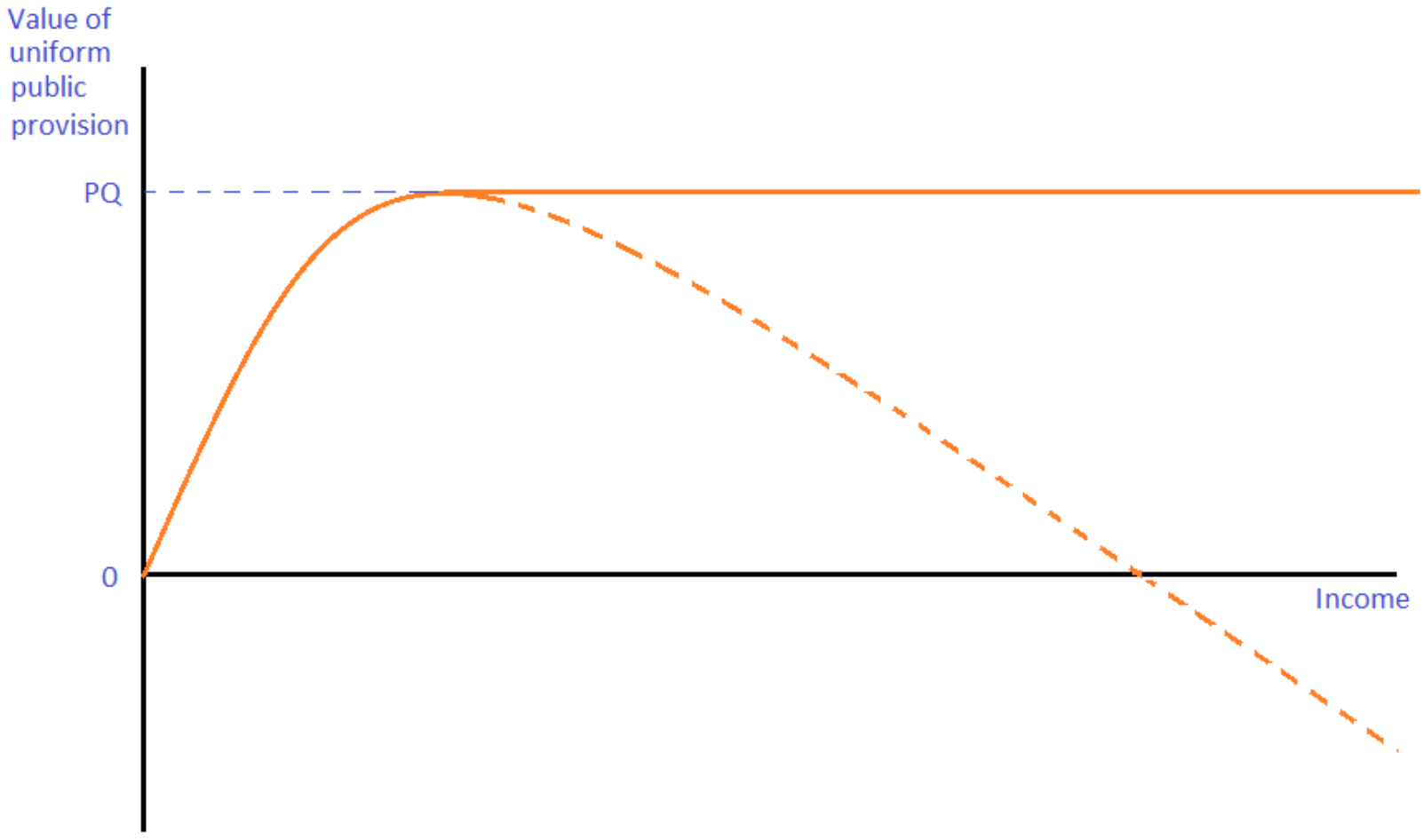
Public provision of private goods: topping up

- If individuals can opt out of public provision then
  - richer households for whom value would otherwise be negative will
- If individuals can supplement public provision then
  - benefits will not decline for richer households
  - cost of provision will accurately reflect use at the top end

Public provision of private goods: topping up

- If individuals can opt out of public provision then
  - richer households for whom value would otherwise be negative will
- If individuals can supplement public provision then
  - benefits will not decline for richer households
  - cost of provision will accurately reflect use at the top end

Publicly-provided *private* goods: topping up



Institute for Fiscal Studies

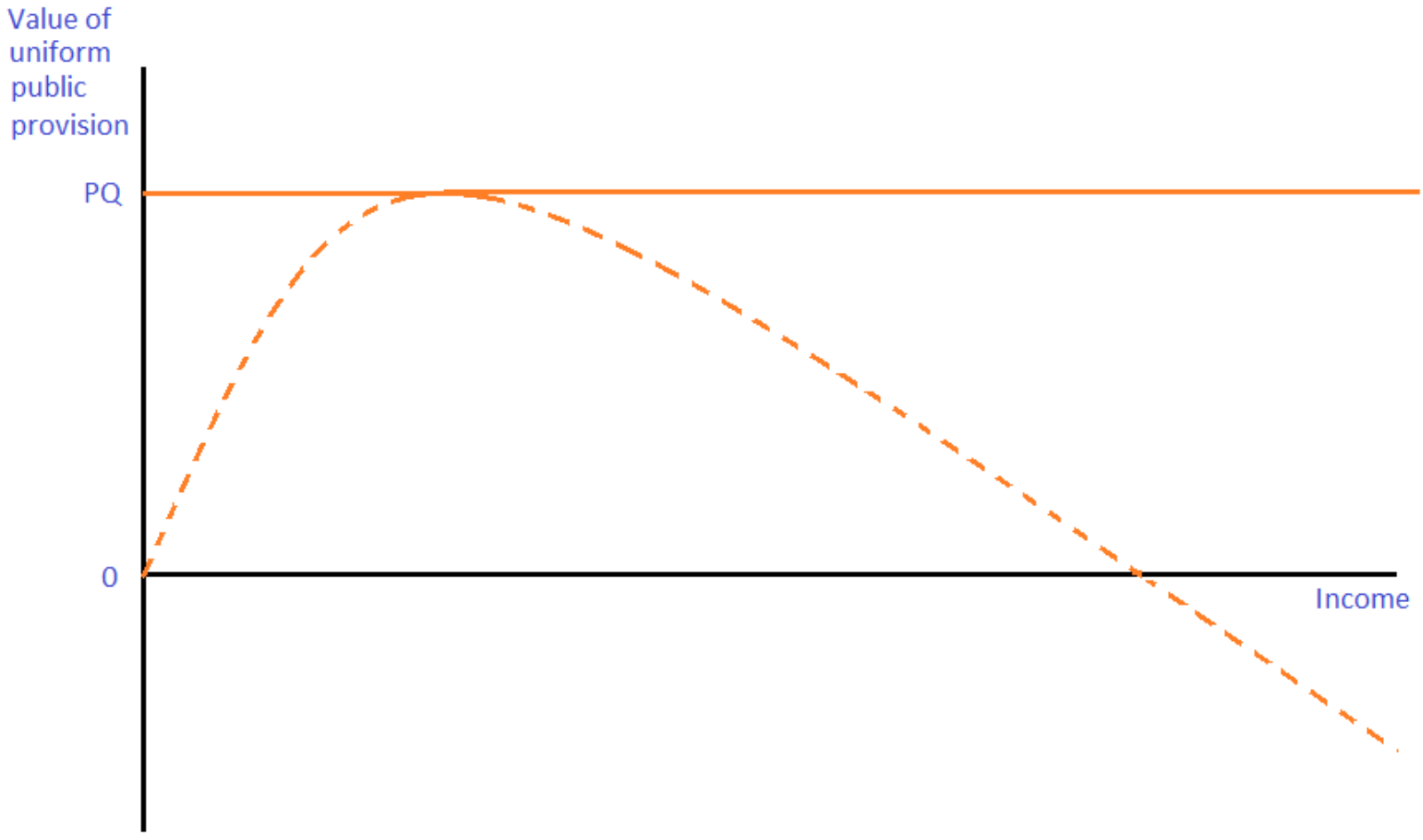
Public provision of private goods: private reselling

- If individuals can opt out of public provision then
  - richer households for whom value would otherwise be negative will
- If individuals can supplement public provision then
  - benefits will not decline for richer households
  - cost of provision will accurately reflect use at the top end
- If individuals can sell the publicly provided good then
  - provision will be equivalent to a cash transfer
  - benefits will be flat
  - cost of provision will accurately reflect use throughout the distribution

Public provision of private goods: private reselling

- If individuals can opt out of public provision then
  - richer households for whom value would otherwise be negative will
- If individuals can supplement public provision then
  - benefits will not decline for richer households
  - cost of provision will accurately reflect use at the top end
- If individuals can sell the publicly provided good then
  - provision will be equivalent to a cash transfer
  - benefits will be flat
  - cost of provision will accurately reflect use throughout the distribution

Publicly-provided *private* goods: reselling



Institute for Fiscal Studies

Distribution of quantities

- Distributional impact follows from
  - the level of service provided
  - the way in which willingness to pay for service provided varies with income
- The determination of level of service is a matter of political economy
  - Presumably suits the politically most influential
- More affluent individuals may be able to find ways to enhance entitlement to consumption of better quality services
  - They may (moving to better neighbourhood) or may not (social advantage) have to pay for that

Distribution of quantities

- Distributional impact follows from
  - the level of service provided
  - the way in which willingness to pay for service provided varies with income
- The determination of level of service is a matter of political economy
  - Presumably suits the politically most influential
- More affluent individuals may be able to find ways to enhance entitlement to consumption of better quality services
  - They may (moving to better neighbourhood) or may not (social advantage) have to pay for that

Sources of information on valuation

- Several potential sources available to the inventive
  - Willingness to pay surveys
  - Voting data
  - Capitalisation of locally specific benefits
  - Markets for substitutes
- ... but none of these seem especially robust

Benefits of education spending

- Part of the benefit of education may be consumption benefit but most is received in monetary terms in improved future earnings
- This raises important conceptual issues
  - Need to model returns to education
  - Benefits received in future - calls for life-cycle perspective
  - Identity of beneficiaries is unclear - parents, children, dynasties?
    - Makes a difference whether costs allocated according to income of parents, current income of student, future income of student

Distributional impact of education spending

- To what extent do benefits vary with income?
- Participation differs with income
  - Private costs of participation (forgone work, earnings) higher for more borrowing-constrained - higher nonattendance, higher dropout
  - Selection into higher levels of education favour the better-off
- Returns differ with income
  - Return to education may be complementary to income-related characteristics
  - Better educated families more familiar, more socially at ease with system
  - Peer effects may be significant
- Quality of school differs with income
  - Rich can afford more effort to satisfy entry criteria (moving near to better schools)
  - Political economy of provision may direct resources to the better off

Distributional impact of education spending

- To what extent do benefits vary with income?
- Participation differs with income
  - Private costs of participation (forgone work, earnings) higher for more borrowing-constrained - higher nonattendance, higher dropout
  - Selection into higher levels of education favour the better-off
- Returns differ with income
  - Return to education may be complementary to income-related characteristics
  - Better educated families more familiar, more socially at ease with system
  - Peer effects may be significant
- Quality of school differs with income
  - Rich can afford more effort to satisfy entry criteria (moving near to better schools)
  - Political economy of provision may direct resources to the better off

Distributional impact of education spending

- To what extent do benefits vary with income?
- Participation differs with income
  - Private costs of participation (forgone work, earnings) higher for more borrowing-constrained - higher nonattendance, higher dropout
  - Selection into higher levels of education favour the better-off
- Returns differ with income
  - Return to education may be complementary to income-related characteristics
  - Better educated families more familiar, more socially at ease with system
  - Peer effects may be significant
- Quality of school differs with income
  - Rich can afford more effort to satisfy entry criteria (moving near to better schools)
  - Political economy of provision may direct resources to the better off

Distributional impact of education spending

- To what extent do benefits vary with income?
- Participation differs with income
  - Private costs of participation (forgone work, earnings) higher for more borrowing-constrained - higher nonattendance, higher dropout
  - Selection into higher levels of education favour the better-off
- Returns differ with income
  - Return to education may be complementary to income-related characteristics
  - Better educated families more familiar, more socially at ease with system
  - Peer effects may be significant
- Quality of school differs with income
  - Rich can afford more effort to satisfy entry criteria (moving near to better schools)
  - Political economy of provision may direct resources to the better off