Economic Theory and Policy Analysis

Or

When and how should government intervene?
Assumptions & Constraints

• *Traditional microeconomics assumes* ...
  – People seek to be “economically rational”
  – Choice is life enhancing and resources are limited
=> deductive reasoning from theory => concept of economic welfare/efficiency

• *Behavioural economics asks*
  – How do people behave? (more complex framework)
=> Inductive reasoning => more nuanced approach to policy
Recall concepts of market efficiency

• When there are no distortions, the market system maximizes economic welfare, i.e., the value of consumer + producer surplus

• When there are no distortions, government intervention in markets can reduce welfare

• Government intervention can improve welfare if there are distortions ... and there are lots of distortions....
Nature of Distortions

1. **Externalities** – market supplies too little or too much
2. **Public goods** – market fails to supply adequately
3. **Monopoly power**, both exogenous and endogenous – markets are restricted
4. **Risk and uncertainty** – perfect contingency markets do not emerge
5. **Imperfect information** is widespread
1. Externalities

• Effects not internalised by the market

• Implications

• Approaches available:
  – Regulate
  – Tax / subsidy
  – Moral suasion
  – Allocate property rights
2. Public Goods

- Market will not emerge because of “non-excludability and non-rivalness”
- Implications
- Approaches Available:
  - Direct public provision
  - Mixed public-private provision (e.g., PPPs and outsourcing)
  - Private provision under public regulation
3. Monopoly Power

- **Exogenous** – due to increasing returns to scale
- **Endogenous** – due to non-competitive behaviour in the market place
3.a Exogenous Monopoly Power

- Increasing returns to scale => natural monopoly
- High MES relative to market size

**Implications**

**Approaches available:**
- Regulation
- Public ownership
- Trade policy
- FDI (new entrants)
3.6 Endogeneous Monopoly Power

• Likely to build on current or previous exogenous monopoly power

• Implications

• Approaches available:
  – Proactive free trade policy
  – Proactive competition policy
  – Regulation
4. Risk and Uncertainty

• Perfect contingency markets do not emerge because of
  – transactions costs
  – asymmetric information => principal-agent problem => moral hazard; adverse selection

• Implications

• Approaches available:
  • Regulation
  • Public provision
  • Public Information
5. Imperfect Information

- Asymmetric information available to consumers / producers
- High transactions costs of consumers gaining information

Implications

Approaches available:
- Information provision
- Regulation to protect consumers
Main Arguments for Government Intervention

Given fundamental objectives:
• To address market failure(s)
• To enhance growth
Neoclassical Welfare Economics

• Traditionally only two fundamental economic objectives:
  – Welfare of future generations, seen as achieved primarily by Growth, which is generated by Efficiency in use of resources (exogenous) and growth of resources (endogenous)
  – Welfare of the present generation, which is seen as achieved by increased Equity, generated by income redistribution (vertical & horizontal)

• All other objectives are subsumed by these
• Today increased emphasis on quality of life which is broader than Economic Growth (e.g., Atkinson; Picketty)
Concept of Pareto Optimum

• Efficiency usually characterised in terms of a Pareto Optimum – two part definition:

  • **Productive dimension**: No more of one good can be produced without less of some other good being produced

  • **Allocative dimension**: No one can be made better off without someone else being made worse off

• If there is not a Pareto Optimum, intervention can help..
Two Fundamental Theorems

1. A market equilibrium **without distortions** will achieve a **Pareto Optimum** (Efficient Equilibrium) => pro-market bias among economists

2. Any specific Pareto optimum (**optimum optimorum**) can be achieved via a market equilibrium combined with appropriate lump-sum taxes and subsidies => search for non-distortionary taxes and subsidies
Fig 1: Efficiency

What policy would help to bring you closer to the frontier?

Non intervention Equilibrium
Fig 2: Growth

What policy/policies would help to shift out the frontier?
Fig 3: Optimum Optimorum
Economic Policy Goals

• **Economic Growth** reflects intra-generational emphasis - “Optimal growth” reflects trade off between living standards today and living standards tomorrow.

• Usually growth is seen as synonymous with efficiency but there can occasionally be trade offs, especially if there are market failures *examples?*

• **Growth versus growth per capita?** Migration and the *Celtic Tiger*
Growth through

• Increased efficiency
  – Reducing market failures (Fig 1)

• Increased factor productivity (endogenous growth)
  – Human capital, technological advance (Fig 2)

• How much growth? (apply Fig 2)

• Income growth and quality of life...
  – Mainstreaming of quality of life concerns
Equality

• Concept of ‘SWF’ – society’s value system – UK!
• Utilitarian welfare function is based on
  – Individualism – sum individual welfares/utilities
  – Liberalism – respect for preferences
• Welfare maximization => income equality!
• But if individuals are not identical in skill potential and in responsiveness to incentives, should income distribution be totally equal?
Equality

- Rawlsian approach – maxi-min applied to all policy considerations (social inclusion)
- Implication of approach for policy, e.g. taxation on saving, work effort and risk;
- Seek equality of opportunity rather than outturn
- Concepts of vertical and horizontal equity
- Concepts of regional equity .. measurement
Proximate Objectives

Easily understood / closer to personal reality

- Employment (DJEI/DSP)
- Price stability (CBI/DoF)
- Relative Competitiveness (Government)
- Relative Standard of Living (Government)
- Inclusivity (DSP/DES)

*Note: Proximate objectives can also be seen as instruments*
Employment

• Full employment of all factors is necessary for efficiency, i.e., no waste

• Employment per se is a “proximate” goal – associated with positive social/economic effects

• Leisure / unemployment / retirement

• Can there be a trade off between growth and employment in SR / LR?

• Value of employment - social goal, effective means of income distribution, positive incentives
Price Stability

• Important for
  – Confidence / Negotiation / certainty
  – Legacy from 1970s and 1980s

• Importance of measurement – CIP / HICP

• Special measures for specific purposes?
  – Age / Health-compromised / Fiscal

• Complexity when economy is going through major structural change – rigidity not best!
Competitiveness

- Increasingly important with globalisation
- All areas of economy are subject to competitiveness considerations
- SR emphasis: Direct measures (pay / unit costs)
- LR emphasis: Indirect measures (productivity / fiscal environment / education / R&D / quality & cost of public & regulated services)
- Approach to competitiveness indicators (DJEI)
- Indicators wider than competitiveness =>
Standard of Living Indicators

- CSO *Measuring Ireland’s Progress*
- Need for international comparability - should they be part of competitiveness?
- Sub-national measures – by location and group
Inclusivity

- Rawlsian flavour
- Multiple definitions
- European dimension
- Social > economic concepts
- Concept of Social Capital
- Targeted approaches – complexity of delivery
Implications for Policy

• Seek to achieve stated objectives
• Seek to correct market failures, prioritising large failures and failures where the net benefit is large
• Be systemic: consider how full range of policy interventions combines
• Build in the responsiveness of agents to policy instruments introduced – *behavioural economics*
• Ensure policy instruments are efficient – *beh. Econ.*
• Take account of cost of raising taxes in terms of tax distortions (excess burden)
Broad Policy Approaches

1. Undertake Expenditures (public provision)
   - Projects; Programmes; Services; PPPs
2. Pigovian taxes / subsidies to alter behaviour
3. Regulation of markets
4. Competition policy
5. National Agreements

Choice of method depends on context (legal, administrative, political, social, history)

Multiple methods and interactions can be important*

*Net effects of government intervention
Government Intervention

- Competition Policy
- Direct Market Regulation
- Indirect Market Regulation
- Projects and Programmes
- Taxes and Subsidies
Government Intervention

- **Competition Policy**
  - Objectives:
    - Tackle
    - Prevent
    - Promote
    - Anti-comp behaviours
    - Anti-comp mergers
  - Objectives:
    - Address natural monopolies
    - Tackle 'created' monopolies
    - Market efficiency

- **Direct Market Regulation**
  - Objectives:
    - Support orderly functioning of markets
    - Promote and enforce standards

- **Indirect Market Regulation**
  - Objectives:
    - Supply public goods
    - Address market gaps
    - Promote growth
    - Redistribute income
    - Redistribute wealth
    - Alter behaviour
    - Address externalities
    - Promote redistribution

- **Projects and Programmes**
  - Objectives:
    - Supply public goods
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    - Promote growth
    - Redistribute income
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    - Address externalities
    - Promote redistribution

- **Taxes and Subsidies**
  - Objectives:
    - Raise revenue
    - Redistribute income
    - Redistribute wealth
    - Alter behaviour
    - Address externalities
    - Promote growth
Government Intervention

Competition Policy
- Direct Market Regulation
- Indirect Market Regulation
- Projects and Programmes
- Taxes and Subsidies

Policy Instruments:
- Legislation
- Enforcement
- Information
- Advocacy/ Education

Policy Instruments:
- Legislation
- Regulatory institutions
- Regulatory Interventions and rules
- State controlled companies

Policy Instruments:
- Legislation
- Set rules and standards
- Promote competition

Policy Instruments:
- Develop infrastructure
- Provide public services

Policy Instruments:
- Broad based tax system
- Pigovian taxes
- Tax incentives to promote growth
- Social welfare system
1. Competition Policy

- Establish general approach (legal context)
- Establish rules of operation
- Establish basis for enforcement
- Operationalise
- Revise as required – once per decade?
- Generate consumer awareness (advocacy)
- Maintain clarity of target for competition policy
2. Direct Market Regulation

- Clarity of target for regulatory approach
- Choice of regulatory mechanisms – legislation; rules; institutions
- Ex ante expectation of impact / cost of operation (government + user) of approach
- Potential interaction with existing instruments / structures / changes in technologies
- Review of structures and rules Confirmation / revision / abolition of regulation
3. Indirect Market Regulation

- Choice of regulatory instrument(s) according to purpose
- Potential interaction with existing instruments
- Ex ante expectation of impact / cost of operation (government + user)
- RIA (government + user)
- Confirmation / revision / abolition of regulation
- Revisit precise target for regulation/de-regulation
2a/3a Role of state bodies

• State companies were traditional way of delivering key services (telephones / gas / electricity)
• Public bodies were traditional way of delivering key services (waste / water)
• Change driven by EU regs and need to contain costs
• Confusion over competition and cooperation?
• Confusion over LR policy goals (e.g. sustainable energy) and energy market competition?
• Issue of governance and delivery – New public Management ... what is the essence of the public/private sector difference???
4a. Projects

- Decision to undertake a capital expenditure directly or via PPP
- *Ex ante* project appraisal/*Cost benefit analysis*
- Crucial issues:
  - Does project have a positive NPV when ALL costs are taken into account?
  - Is project managed efficiently
- If wrong project is undertaken, or project runs over budget, nothing can be done, i.e., *ex post* evaluation only relevant to later projects (C&AG)
4b. Programmes

• Analysis to determine what is required
• Analysis to design policy instrument(s)
• Pilot: administering and costing – use BE?
• Evaluation / review to determine
  – if it is achieving its goals – evaluation issue
  – if it is being delivered in the most “efficient” manner – issue of service delivery
• Confirmation / revision / abolition of programme
Major Issues for Projects and Programmes

• Information required to make initial decision
• Determination of appropriate reference points / benchmarks
• Difficulty of achieving an independent, strong appraisal / evaluation / etc
• Difficulty of making change when necessary, unless previously signalled – value of pilot
• Difficulty of precedent(s)
Role of PPPs

• Analysis to determine what is required
• Analysis to determine if PPP is the appropriate vehicle
  – Mixture of capital and recurrent
  – Issue of risk and uncertainty
• Budgetary attraction
• Requirements?
• Detail is crucial – legal, technical
• Conflicting interests of stakeholders?
• Difficult of “get out” if errors made...
5. Taxes/Subsidies and Charges!

• Choice of distortion-minimizing taxes (rates and base)
• Reference to canons of tax, incidence, and legal context
• Introduction of taxes and monitoring of impact in terms of efficiency and equity
• Revision of rates / base
• Use of tax revenue (hypotheecation)? WATER!
Government Intervention

Competition Policy

Direct Market Regulation

Indirect Market Regulation

FPR
- Weeks 4/5
- Market Power & Definition
- Vertical Restraints

PG/SL
- Weeks 2/3
- Designing Regulation
- Institutions/Interventions
- Weeks 7/8
- Sectoral Regulation
- Privatisation & Banking; Networks & Utilities

RL
- Weeks 9/10;
- Regulation and Outcomes
- Housing Competitiveness