EC8014: Economic Evaluation: Theory, Techniques & Applications

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Course Introduction

1. Course Focus & Structure
2. Course Outline
3. Course Assessment
4. Course Resources
5. Class Format

1. Course Focus & Structure

- An applied focus throughout
  - although some theoretical foundations first
  - Part I: Theory
  - Parts II: Theory and Methods
  - Part III: Applications
- Seven lecturers:
  - Parts I, II : Micheál Collins
  - Part III: Michael King, Edgar Morgenroth, Seamus McGuinness, Alan Matthews, Anne Nolan and Brendan O'Connor
- Letting you see policy evaluation in action
  - dissertation focus

2. Course Outline

Part I: Course Introduction

1. Theory, Techniques and Applications of Economic Evaluation: an introduction - MC

Part II: Methods for Economic Evaluation

2. Programme Evaluation: key questions, methodologies and guidelines - MC
3. Project Evaluation: key questions, methodologies and guidelines - MC
4. Class presentations - MC

Part III: Applications of Programme & Project Evaluation

5. Development – Michael King
6. Infrastructure & Environment – Edgar Morgenroth
7. Labour Market – Seamus McGuinness
8. Agriculture and Food – Alan Matthews
9. Health – Anne Nolan
10. Taxation – MC and Brendan O'Connor
11. Other Methods & Conclusion - MC

3. Course Assessment

Term	Assessment	Details	% Marks
Week 4	Presentation to Class	In groups of 2-3. Review, commentary and critique of key Economic Evaluations documents. Details distributed on 16th October.	20%
Week 9	Data Assignment	Assignment will require students to use supplied datasets to undertake a short economic evaluation of a selected policy.	40%
Week 1 (HT)	Economic Evaluation Plan	Assignment will require students to design an economic evaluation of a selected programme or project. A detailed outline of the assignment will be distributed in class on November 27th, submission by 5pm on Friday January 15th 2016.	40%

4. Course Resources

- Reading
  - No overall textbook
    - Lunn and Ruane (2013) = very relevant (see later)
  - Handouts and documents
  - Most via the course website
  - Additional links and material via the website
  - All lecture notes on the website

- Contact by e-mail

5. Class Format

- Interactive!
- Break half way through
- 2 heavy sessions (Oct 9th and 16th)
- Presentations and guest lecturers will have an interactive focus

Topic 1. Theory, Techniques and Applications of Economic Evaluation: an introduction

Dr Micheál Collins
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1. Welfare Economics: an introduction
2. Government Intervention
3. The Analysis of Public Expenditure
4. The Irish Fiscal Context in Brief
5. The Irish Policy Context in Brief
6. Discussion
7. Reading for Topic 1

1. Welfare Economics: an introduction

- Normative and Positive Economics
  - Positive economics = what 'is'
    - how the economy functions…
    - e.g. models of economic activity and implications of various changes/policies
  - Normative economics = what 'should be'
    - the desirability of various actions
    - involves some value judgements
    - but should be focused on limiting/justifying these
      - If these are the objectives, then the best approach is…
    - often positive economic analysis used to inform normative economic decisions

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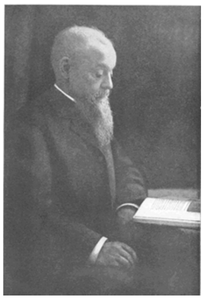
- In the context of policy making/evaluation, Stiglitz suggested that:

  'Normative economics is concerned with developing systematic procedures by which we can compare the gains of those who are better off with the losses of those who are worse off, to arrive at some overall judgement concerning the desirability of the proposal' (2000:19)

- Welfare Economics:
  - a branch of economics focused on normative issues

- Welfare Economics and Pareto Efficiency
  - Pareto efficiency:
    - resource allocations that have the property that nobody can be made better off without making somebody else worse off
    - an efficient, or Pareto optimal, outcome
    - also talk about 'Pareto improvements'
    - a change that makes some individuals better off without making anyone worse off
    - note: concerned with aggregate picture rather than distribution of the gains

Vilfredo Pareto
(1848-1923)



- Fundamental Theorems of Welfare Economics
  - two key results from welfare economics
  - revisit from M. King micro lectures last year (Remember!)
  1. Perfect Competition + Market ➔ Pareto Efficiency
     - a competitive mkt will be Pareto efficient
  2. Perfect Competition + Lump-Sum Taxes and Subsidies + Market ➔ Pareto Optimality
     - a competitive mkt + redistribution can give the optimal outcome

2. Government Intervention

- But, markets may not be Pareto efficient
  - there may be 'market failure'
  - something wrong/preventing that outcome
  - a rationale for government intervention
- Look at
  - 6 market failures
  - 2 further reasons for government intervention

1. Failure of Competition
   - should be perfect competition (characteristics)
   - but in some cases monopoly, oligopoly, monopolistic competition
   - P > MC…welfare loss

2. Public Goods
   - private mkts often will not supply (or will supply too little) of public goods
   - these are goods which are: non-rivalrous, non-excludable and non-rejectable
   - defence, lighthouses, roads, education…

3. Externalities
   - the actions of one individual/firm affect others; where one imposes costs on the others and does not compensate them for this
   - welfare loss
   - pollution (negative externality)
   - can be positive: bee-keeper with the orchard next door, vaccinations

4. Incomplete Markets
   - where cost of production < mkt price
   - but good not supplied
   - insurance (for exports…)

5. Information Failures
   - asymmetries of information
   - prevents the mkt developing
   - e.g. insurance (health, life and fire)
     - adverse selection / moral hazard

6. Failure of a market to develop
   - you need both D and S
   - AIDS vaccine

- Taken together, all six result in economic inefficiencies in the absence of government intervention

- 2 further reasons for Government Intervention
  - even if a Pareto efficient outcome
  - where outcome gives rise to a socially undesirable distribution of income
    - redistribution
    - taxation
  - where outcome is not societally ideal
    - merit goods: basic education; seat belts
    - paternalisim (merit bads): smoking, alcohol, drugs, asprin

- Even in the context of these mkt failures
  - not implying desirability of gov intervention
  - if intervention is to occur, the proposed intervention needs to be examined/evaluated.
  - hence the course…

3. The Analysis of Public Expenditure

- The focus of the rest of the course
- A few concepts and considerations here:
  - A key Q: Why is there a need for this intervention?
  - 'Crowding-out'
    - what is the effect on the private sector of this government intervention
    - will it impede private sector provision/activity
  - Behavioural Response to the intervention
    - could this undermine the case for the intervention
    - higher SW to decrease poverty, but decreased incentive to work…

- Incidence questions
  - who is really benefiting/paying?
  - is this who is being targeted by the policy?
  - subsidy to elderly care…gains to elderly or their children?
- Deadweight questions
- Will the benefits be capitalised?
  - CBA of new Luas line
  - big benefits = saving of time
  - property prices near line ↑ to reflect this
  - benefit is capitalised and flows to property owner
  - is this OK? (in the aggregate / societally)

4. The Irish Fiscal Context in Brief

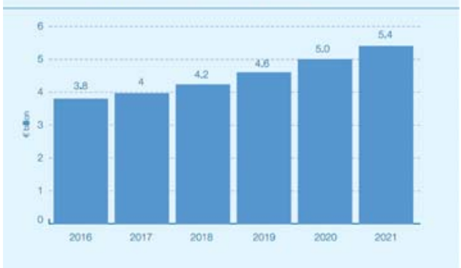
- Government Expenditure
  - www.finance.gov.ie
  - using *Stability Programme Update – April 2015*
  - Revisions due in Budget 2016
  - Some in Capital Programme
  - Table on next two slides and attached

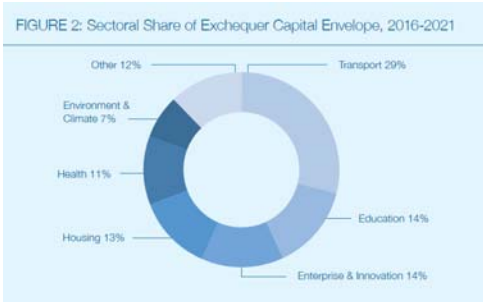
Table 10: Budgetary projections 2015-2020

€ million	2014	2015	2016	2017	2018	2019	2020
CURRENT BUDGET							
Expenditure							
Gross Voted Current Expenditure	50,455	49,715	50,045	50,345	50,645	50,945	51,245
Non-Voted (Central Fund) Expenditure	10,730	9,770	9,895	9,595	9,795	9,810	9,690
Gross Current Expenditure	**61,185**	**59,485**	**59,940**	**59,940**	**60,440**	**60,755**	**60,935**
less Expenditure Receipts and Balances	11,435	11,205	11,135	11,450	11,760	12,150	12,560
Net Current Expenditure	**49,750**	**48,280**	**48,805**	**48,490**	**48,680**	**48,605**	**48,375**
Receipts							
Tax Revenue	41,280	43,300	45,290	45,865	49,925	50,835	52,875
Non-Tax Revenue	2,965	3,350	3,090	2,280	2,080	2,035	2,050
Net Current Revenue	**44,245**	**46,650**	**48,380**	**48,145**	**52,005**	**52,870**	**54,925**

€ million	2014	2015	2016	2017	2018	2019	2020
CURRENT BUDGET BALANCE	-5,505	-1,630	-425	-345	3,325	4,265	6,550
CAPITAL BUDGET							
Expenditure							
Gross Voted Capital	3,550	3,670	3,690	3,785	3,785	3,785	3,785
Non-Voted Expenditure	1,635	1,215	900	890	900	885	885
Gross Capital Expenditure	5,185	4,885	4,590	4,675	4,685	4,670	4,670
less Capital Receipts	350	300	300	300	300	300	300
Net Capital Expenditure	4,835	4,585	4,290	4,375	4,385	4,370	4,370
Capital Resources	2,155	2,750	2,930	980	990	990	980
CAPITAL BUDGET BALANCE	-2,680	-1,835	-1,360	-3,395	-3,395	-3,380	-3,390
EXCHEQUER BALANCE	-8,185	-3,465	-1,785	-3,740	-70	885	3,160
GENERAL GOVERNMENT BALANCE	-7,630	-4,610	-3,580	-2,055	-290	1,645	4,075
% of GDP	-4.1	-2.3	-1.7	-0.9	-0.1	0. 7	1.7

FIGURE 1: Exchequer Capital Envelope 2016 to 2021





4. The Irish Policy Context in Brief

- At the outset a number of points to highlight
- Irish focus given course, but internationally applicable
  - theory and methods travel
  - development application…
- Given fiscal context, a growing interest in economic evaluation
  - making and defending choices on the allocation of scare resources
  - value for money
  - to date interest in Ireland = counter-cyclical
  - suggestions that this might change

- Was
  - more validation than evaluation
  - limited rigorous evaluations
  - fiscal climate was not to ask hard questions
  - evaluation perceived as ‘negative attitude’…
- Now
  - fiscal pressures and other demands
  - higher taxes and borrowing to pay for this…
  - greater external and internal oversight
  - questioning / justification of decisions….

- Key Government documents which we will draw on:
  - DPER: Public Spending Code
  - from CEEU under Government Economic and Evaluation Service
  - http://publicspendingcode.per.gov.ie
- Some interesting recent observations:
  - Ruane in Administration (2012): see website
  - Lunn and Ruane book: see course outline

- From ad hoc to formal
  - carries challenges on how to do this, why, who, explaining it, incorporating it into the policy process from the outset, incorporating it into decision making, learning from evaluation process…
  - who should evaluate?
  - scarcity and efficiency at the core

- Ruane had a nice take on the ***who should undertake evaluations question***:

  1. Programme/project promoters?
  2. Programme/project designers?
  3. Programme implementers?
  4. Evaluation units within departments/agencies?
  5. Central [national] evaluation unit?
  6. Outside evaluators?

  Answers: 1,2,3,: **NO!** 4: **MAYBE?** 5,6: **YES**
- Promoting/designing/implementing/evaluating must be kept separate for good governance

- Also:
  - independent steering groups appointed before ToR written
  - established methods and parameters
  - peer-review
  - publication of evaluations
  - climate of acceptance of role of evaluation…
- Finally:
  - data is improving
  - data accessibility is improving
  - international good practice to draw on
  - public service evaluation network (IGESS)
  - 'evidence based policy' …

6. Discussion

7. Reading for Topic 1

- Stiglitz, J.E. (2000) *The Economics of the Public Sector* (3rd edition). Chapters 1, 3, 4 and 10
- Cullis, J. and P. Jones (1998) *Public Finance and Public Choice* (2nd edition). Chapters 2 and 3.
- Ruane, F (2012) 'Research Evidence and Policymaking in Ireland' *Administration* Vol. 60 no.2 pp 119-138.
- Lunn, P and F. Ruane (eds) (2013) *Using Evidence to Inform Policy*. (various chapters)

Thesis Topics

- Lots to come on this across the course
- Some views and ideas at the outset
  - Use available data…there is so much
  - Model a policy reform?
    - Taxation change – VAT ↑↓; fatty foods tax…
  - Evaluate an intervention – current, past, proposed
    - e.g. new road tolls; water metering…
  - Discussion

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Source: Department of Finance

Notes:

- Figures may not sum due to rounding
- This table is prepared on a cash basis. The comparison between 2015 and 2016 is impacted by an amount of €270m that represents the crystallisation of a pay and pensions accrual. Excluding this amount the year on year increase in voted current expenditure is €600m.
- The voted expenditure amounts do not include a provision to cover inflationary pressures. Each 1% on the Exchequer pay & pensions bill costs €175m and 1% on Social Protection payments amounts to €185m.
- It is assumed that capital expenditure increases in line with published figures into 2017. Post 2017, the allocation is left unchanged in nominal terms. This is a technical assumption and these allocations will be revised upwards when the Capital Review is published in due course.