

MACQUARIE UNIVERSITY



Division of Economic and Financial Studies

ECON210 PUBLIC ECONOMICS

<http://online.mq.edu.au/pub/ECON210/>

Course Outline

2005 Second Semester

Prepared by Professor Peter Abelson

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Overview of the Course

I Nature of Government

- 1 Foundations of Public Economics
- 2 Government in Practice

II Markets and Government

- 3 Efficiency of Competitive Markets
- 4 Market Failures and Equity

III Economic Basis of Public Policy

- 5 Individual and Social Welfare
- 6 Economic Evaluation: Cost-Benefit Analysis
- 7 Public Choice

IV Building Economic Foundations

- 9 Public Goods and Externalities
- 10 Competition / Industry Policy and Information Policies

V Delivering Public Services

- 11 Delivering Efficient Public Services
- 12 Pricing and Ownership
- 13 Health and Education

Note: Week 8 contains Labour Day Public Holiday (on Monday) and consequently there will be no lectures that week or any tutorials.

Staffing

Professor Peter Abelson is lecturer-in-charge of ECON 210. Dr. Kathy Tannous is tutor-in-charge of the course and will administer the website. Kathy will deal with routine administrative questions. Other lecturers are Dr. Pundarik Mukhopadhaya and Ms Vicki Le Plastrier.

Students who wish to discuss course material or questions should take up their questions in the first instance with the lecturer or tutor who runs their tutorial group.

Staffing contacts

Name	Room	Tel. No.	Consultation hours
Peter Abelson	C5C 323	9850 8512	Mondays 2.0 – 5.0
Pundarik Mukhopadhaya	C5C 376	9850 6472	To be advised
Vicki Le Plastrier	C5C 360	9850 8479	To be advised
Kathy Tannous	C5C 341	9850 8496	To be advised

Introduction to Course

Welcome to *Public Economics (ECON 210)*. This course deals with the role of government, public expenditure and public policy. Government regulates almost every economic activity and most markets and government expenditure accounts for a third of gross national expenditure. Understanding the role of government in the economy is a fundamental part of the training of an economist. It should also be part of the education of anyone who takes an active interest in the political conduct of the country.

Public Economics discusses how government should, and does, establish the basic rules for the working of the economy and how resources are allocated and distributed. A theme of the course is the economic basis of public policies. The focus is on microeconomic issues and management rather than on macroeconomic policy. Thus *ECON 200* is a compulsory prerequisite for doing this course. However, the course also discusses the role of government in economic growth.

ECON 210 should be viewed as the first part of a two semester study, the other part being the *Economics of Taxation and Social Security (ECON 211)*. *ECON 211* deals with issues of public finance, taxation and social welfare. This is strongly recommended as a complementary course to *ECON 210*.

ECON 210 is a core course for economics students. It provides a foundation for several other courses in economics, notably courses industry economics, environmental economics, and taxation and social welfare.

ECON 210 is a demanding course. The course builds on the micro foundations of *ECON 200* and deals with complex issues. It requires an understanding of concepts and empirical methods. We are dealing with fundamental issues about the nature of society. This is based on an analytical and structured approach. An understanding of institutions is also important. Students are expected as a matter of course to be conversant with topical political and economic issues.

Importantly, the purpose of education is not to provide answers to particular questions but rather to assist students to deal with issues. This means that students should understand economic methods of thought and the use and applications of economics so that you can answer the questions. University work is NOT simply about memorising course notes and answers. This is of little use to you later on. Students must be able to understand the meaning of what they are read and be able to apply this understanding to other readings, to public policies and so on.

The University standard is that students should study at least 9 hours per week in a 3-credit point course. This should be a serious commitment. Surveys have found that a large number of students study for less than six hours per week per course. *This is not sufficient*. In recent years, failure rates in *ECON 210*, as in several other second year economics courses, have been well over 30 per cent. A lack of application has been a significant factor in these failure rates.

This warning applies especially to students who come direct into second year university courses. Experience indicates that these students have a significantly weaker grounding in both economics and basic intellectual concepts and have especially high failure rates, often in excess of 50 per cent.

Students are encouraged to attend lectures and tutorials. Lectures highlight important issues and provide insights into how economists view relevant material and issues.

Students should attend tutorials ready to talk about set questions and related issues. Ten marks will be given for tutorial participation. Students who do not attend lectures or tutorials cannot expect lecturers or tutors to give them individual counselling sessions.

All lecturers and tutors in this course believe that it is an important and interesting course. We hope that you will participate actively in the course.

Course Schedule

The course consists of 12 weeks of two-hour lecture sessions and 8 tutorials. Because we lose a week to Labour Day on 3 October, there will be full lectures and a revision tutorial in week 13.

Lectures will be given on Mondays. Day lectures are from 9.05 a.m. to 10.55 a.m. in X5B T1. Evening lectures are 6.05 - 7.55 p.m. in W5C 320.

Lectures will start punctually. Students should arrive on time. Students may ask questions in lectures. However, it is disruptive and discourteous to arrive late or talk during lectures.

Note that the multiple choice tests are at the start of week 4 and week 11 lectures on 23 August and 25 October respectively.

In addition, there are 8 weeks of tutorials, with the first tutorial in week two.

Course schedule

Week	Date	Lecture Topic	Tutorial
1	01.08	Foundations of public economics	
2	08.08	Government in practice	Foundations of public economics
3	15.08	Efficiency of competitive markets	Government in practice
4	22.08	Class test / Market failures and equity	
5	29.08	Individual and Social Welfare	Competitive market efficiency
6	07.09	Economic Evaluation: Cost-Benefit Analysis	Social welfare
7	12.09	Public choice	Cost-Benefit Analysis
		Mid – semester break	
8	03.10	Labour Day Public Holiday	
9	10.10	Public goods and Externalities	
10	17.10	Competition policy; Information failures	Public goods and externalities
11	24.10	Class test / Efficient Public Services	
12	31.10	Pricing and Ownership	Efficient public services
13	07.11	Health and Education	Pricing, ownership and revision

Course Materials and Readings

The course text is Abelson, P., 2003, *Public Economics, Principles and Practice*, Applied Economics, Sydney.

All lectures shown above are available as chapters in this text (Chapters 1 to 17). The course text also lays out the core questions for each chapter that students are expected to be able to answer.

Useful supplementary texts are:

- Stiglitz, J.E., 2000, *Economics of the Public Sector*, W.W. Norton, New York.
- Rosen, H.S., 2002, *Public Finance*, McGraw Hill, New York.

All texts are available in the library.

Additional readings are provided below for each topic. Note that students are expected to read the starred readings, copies of which will be available in the Library Special Reserve. The starred readings are examinable material.

Website Administration

Certain materials and services will be available through the course website. These materials will include the course outline, lecture slides or overheads, and some readings. To access the website, students will require their username and password. Also, administrative announcements will be made and student's administrative queries answered via the website.

Note however that answers to tutorial and other course related questions will be provided at tutorials and will not be provided on line.

Course Assessment

The assessment will consist of:	Marks
An essay to be submitted by 9.0 p.m. 10 October	15
30 minute multiple choice test 22 August	10
30 minute multiple choice test 24 October	10
Tutorial participation (quality and frequency of participation)	10
End of semester exam	55
Total	100

The multiple choice tests will start promptly at 9.05 a.m. for day students and at 6.05 p.m. for evening students. The first test will cover material in weeks 1 to 3. The second test will cover material in weeks 4 to 10. Day students must attend the day test. They are not permitted to do the evening test.

The end of semester exam will be a three-hour exam (for timing see <http://www.timetables.mq.edu.au/exam>). There will be no individual exams.

The exam will consist of 20 multiple-choice questions (10 marks), three short answers (15 marks) and two essays (15 marks each). It will cover the material for the whole course.

Three hours are allowed for the exam so that students can prepare thoughtful answers without undue haste against time. Students will be expected to have knowledge of the starred readings (see below) as well as the course text and to write properly constructed essays.

In addition, students are required to complete a spreadsheet cost-benefit exercise. This must be done adequately. If students fail to do this to a reasonable standard or by the scheduled time, they will lose marks. The spreadsheet exercise must be handed in by 12 September.

Students who collaborate excessively or without acknowledgment in preparing their semester essay or spreadsheet exercise will lose significant marks. Plagiarism is a serious breach of the University's rules. Plagiarism is the use of the work of another person and presenting it as one's own. See <http://www.student.mq.edu.au/plagiarism>.

In order to pass the course, students are expected to achieve an overall mark of 50 or more for the course and a mark of 27 or more for the end of semester exam.

Students should work steadily through the semester and prepare physically as well as academically for tests.

In the event of documented adverse personal circumstances, such as accident, illness, etc., a supplementary exam may be granted. However, when a student has extra time to prepare while suffering only a minor ailment, a higher standard is expected in the deferred exam. Also, students who sit the regular final exam and then request a supplementary exam should know that, if a supplementary exam is granted, his or her performance in the supplementary exam may raise **or** lower the result obtained in the regular final exam.

Tutorials

Tutorial questions are appended to the course outline. Students should come prepared to answer these questions. In addition, students are expected to be able to describe the **key concepts** and the **discussion questions** in each chapter (1 to 17) in the course text, which are in some cases different from those shown below.

Readings in addition to the Course Text

Week 1: Foundations of Public Economics

- (*) Musgrave, R.A and P.B.Musgrave,1989. *Public Finance in Theory and Practice*, Chapters 1 and 2, McGraw Hill, New York.
- Holcombe, R.G., 1998, 'The Foundation of Normative Public Finance', pp.1-42, in F.Thompson and M.T.Green (eds.), *Handbook of Public Finance*, Marcel Dekkar, New York.
- Mill, J. S. 1848, *Principles of Political Economy*, Book 5, Chapter 1 (pp 159-166), Chapters 8 to 11 (pp 256-367). Oxford World Classics, Oxford University Press.

Week 2: Government in Practice

- (*) Mueller, D.C., *Public Choice III*, Cambridge University Press, Chapter 21.
- (*) Robinson, M., 2002, 'Accrual Accounting and Australian Fiscal Policy', *Fiscal Studies*, Vol. 23, No.2, 287-300.
- Hackl, F, Schneider, F., and G.Withers, 1993, 'The Public Sector in Australia: A Quantitative Analysis', pp. 212-31 in *The Growth of the Public Sector*, ed. N.Gemmell, Edward Elgar, Aldershot, UK.
- Treasurer, 2005, *Budget Strategy and Outlook 2005-06*, Budget Paper No. 1, <http://www.budget.gov.au>
- Tunny, G., 2000, 'An empirical evaluation of the Baumol cost disease', 29th Conference of the Economic Society of Australia, Gold Coast.

Week 3: Efficiency of Competitive Markets

- (*) Lange, O., 1942, 'The Foundations of Welfare Economics', *Econometrica*, 10, 215-28.
- (*) Rogers, M., 2003, 'A survey of economic growth', *Economic Record*, 79,112-35
- Stiglitz, J.E., 2000, *Economics of the Public Sector*, Chapter 3, W.W.Norton, New York.
- Sachs J.D. and A.Warner, 1997, 'Fundamental Sources of Long-run Growth', *American Economic Association, Papers and Proceedings*, 97, 184-88.

Week 4: Market Failures

- (*) Coase, R.H., 1974, 'The lighthouse in economics', *Journal of Law and Economics*, 1974, October, 357-76.
- (*) Hardin, G., 1968, 'The Tragedy of the Commons', *Science*, 162.
- Bohm, P., 1973, *Social Efficiency: A Concise Introduction to Welfare Economics*, Chapter 2, MacMillan, London.
- Stiglitz, J.E., 2000, *Economics of the Public Sector*, Chapter 4, W.W.Norton, New York.

Week 5: Individual and Social Welfare

- (*) Dupuit, J., 1844, 'On the measurement of the utility of public works', translation by R.H.Barback in *International Economic Papers* No.2, MacMillan Press, 1952, 83-110.
- (*) Pearce, D.W, 1983, *Cost-Benefit Analysis*, pp.1-24, MacMillan, London.
- Stiglitz, J., 2000, *Economics of the Public Sector*, Chapter 5, W.W. Norton, New York.
- Kaldor, N., 1939, Welfare propositions of economics and interpersonal comparisons of utility', *Economic Journal*, 49, 549-52.

Week 6: Cost-Benefit Analysis

- (*) Lesser J.and R.O.Zerbe, Jr., 1998, 'A practitioner's guide to benefit-cost analysis', pp.221-268 in *Handbook of Public Finance*, eds. F.Thompson and M.T.Green, Marcel Dekker, New York.
- Department of Finance, 1991, *Handbook of Cost-Benefit Analysis*, AGPS, Canberra.
- Pearce, D.W., 1983, *Cost-Benefit Analysis*, MacMillan, London.
- Boardman, A., Greenberg, D., Vining A., and D.Weimer, 2001, *Cost-Benefit Analysis, Concepts and Practice*, Prentice Hall, New York.

Week 7: Public Choice

- (*) Khursheed, A.F. and T.E.Borcherding, 1998, 'Organising Government Supply: the Role of Bureaucracy', Chapter 2 in *Handbook of Public Finance*, eds: F.Thompson and M.T.Green, Marcel Dekkar, New York.
- Arrow, K.J, 1950, 'A difficulty in the concept of social welfare', *Journal of Political Economy*, 58, 324-46.
- Mueller, 2003, *Public Choice III*, Chapters 4, 15,16, 19-21, Cambridge University Press, Cambridge.
- Stiglitz, 2000, *Economics of the Public Sector*, Chapter 7, W.W.Norton, New York.
- Wolf, C., 1988, *Markets or Government*, Chapters 3 and 4, MIT Press, MA.

Week 9: Public Goods and Externalities

- (*) Samuelson, P., 1955, 'Diagrammatic exposition of a theory of public expenditure', *Review of Economics and Statistics*, 37, 350-56.
- (*) Boardman, A.E. et al., 2001, *Cost-Benefit Analysis, Concepts and Practice*, Chapters 12-15, Prentice Hall, New Jersey.
- Musgrave, R.A and P.B.Musgrave,1989. *Public Finance in Theory and Practice*, Chapters 4 & 5, McGraw Hill, New York.
- Stiglitz, J.E., 2000, *Economics of the Public Sector*, Chapters 6 and 9, W.W. Norton, New York.
- Coase, R., 1969, 'The problem of social cost', *Journal of Law and Economics*, 3, 1-44.
- Tietenberg, T., 2003, *Environmental and Natural Resource Economics*, 6th ed., Chapter 4, Addison Wesley, New York.

Week 10: Competition Policy and Information Failures

- (*) Viscusi, W.K., Vernon, J.M., and J.E.Harrington, Jr., 2000, *Economic of Regulation and Antitrust*, Chapters, 1, 4, 10, 11, 22.
- Winston, C., 1993, 'Economic Deregulation: Days of Reckoning for Microeconomists', *Journal of Economic Literature*, XXXVI, 1263-1289.
- Productivity Commission, 2001, *Review of the Prices Surveillance Act 1983*, Report No. 14, AusInfo, Canberra. (www.pc.gov.au)
- Treasury (Australian), 2003, *Trade Practices Act Review*, AusInfo, Canberra. (www.treasury.gov.au)
- Stigler, G.J., 1971, 'The Theory of Economic Regulation', *Bell Journal Economics and Management Science*, 2, 3-21.
- Stiglitz, J.E., 2000, 'The contributions of the economics of information to twentieth century economics', *Quarterly Journal of Economics*. 115, no.4.

Week 11: Efficient Public Services

- (*) Robinson, M., 2003, *The Output Concept and Public Sector Services*, Discussion Paper No. 155, Queensland University of Technology, Brisbane.
- (*) Lundsgaard, J., 2002, *Competition and Efficiency in Public-Funded Services*, Working Paper No. 17, Economics Department, OECD, Paris.
- Robinson, M., 2002, *Best Practice in Performance Budgeting*, Queensland University of Technology, Discussion Paper No, 124, QUT, Brisbane.

Week 12: Pricing and Ownership

- (*) Weare, C. and L.S. Friedman, 1998, 'Public Sector Pricing: An Institutional Approach' pp.597-658 in *Handbook of Public Finance*, eds: F.Thompson and M.T.Green, Marcel Dekkar, New York.
- (*) Megginson, W.L. and J.M.Netter, 2002, 'From State to Market: A Survey of Empirical Studies on Privatisation', *Journal of Economic Literature*, XXXIX, 321-89.
- King, S. and R. Pitchford, 1998, 'Privatisation in Australia: understanding the incentives in public and private firms', *Australian Economic Review*, 31, 313-28.
- Mead, M. and G.Withers, (eds:), 2002, *Privatisation, A Review of the Australian Experience*, Committee for Economic Development of Australia.
- Productivity Commission, 2001, *Cost recovery by Government agencies*, Report No.15, Ausinfo, Canberra.

Week 13: Health and Education

- (*) Johnson, D, 2001, 'The economics of health and health policy', *Australian Economic Review*, 34, 295-311. .
- (*) Quiggan, J., 1999, 'Human capital theory and education policy in Australia', *Australian Economic Review*, 32, 130-44.
- Cutler, D.M., 2002, 'Equality, efficiency, and market fundamentals: the dynamics of international medical-care reform', *Journal of Economic Literature*, XL, 881-906.
- Donato, R., and R.Scotton, 1998, 'The Australian health care system', pp.20-39 in *Economics and Australian Health Care Policy*, eds: G. Mooney and R.Scotton, Allen and Unwin, Sydney.
- Johnes, G., 1993, *The Economics of Education*, MacMillan, London.
- Card, D., 1999, 'The causal effect of education on earnings', pp.1801-1864 in O.Ashenfelter and D.Card (eds:), *Handbook of Labor Economics*, Vol.3A, North Holland, Amsterdam

Tutorial 1 Foundations of Public Economics

- 1 What is the relationship between the government and the state?
- 2 Adam Smith and John Stuart Mill are famous economists who are often associated with *laissez-faire* policies. What does *laissez-faire* mean? Why is this a simplistic view of the policies that Smith and Mill actually believed in?
3. What are the basic justifications for government involvement in the economy?
4. What are the main economic functions of government? How do these functions relate to the justifications for government involvement?
5. What are the main ways in which government can intervene in the economy?
6. Suppose, as economists often do, that the aim of public policy is to maximise social welfare, what would be the main components of social welfare? Should the welfare of non-citizen residents have the same weight in a welfare function as citizens of a country?
7. Which of the following are normative statements? Why?
 - Full employment is a desirable policy.
 - Reducing unemployment will increase the rate of inflation.
 - Lower interest rates will reduce the number of unemployed persons.
 - Redistributing income from the rich to the poor increases social welfare.
 - Economists should not make normative statements.
8. Why are rational decisions based on marginal considerations? Can this principle be applied to the public sector? If so, how?
9. What kinds of efficiency and equity arguments might be put for, or against, government subsidising university students? Are these positive or normative arguments?

Tutorial 2 Government in Practice

1. Which of the following measures is the best measure of the size of government? Government expenditure on goods and services, general government expenditure, government tax revenues, or government employment? Give reasons.
2. If government size is measured by the ratio of general government expenditure to gross domestic product, what happens to the size of government if:
 - (i) Government increases welfare payments to unemployed persons, when such transfer payments are not recorded as part of GDP?
 - (ii) Unemployment rises?
 - (iii) Interest rates fall?
 - (iv) Government increases income tax rates?
 - (v) Government requires all households with more than a certain level of income to hold private health insurance?
 - (vi) Government subsidises private health insurance?
 - (vii) Government allows universities to increase fees for courses?
3. What is a government budget deficit? Describe various ways in which budget deficits can be defined, distinguishing between operating and capital costs and between accrual and cash accounting. What tricks can government use to disguise the size of a budget deficit?
4. Explain why tax expenditures can have the same economic effects as actual government expenditures. Give an example.
5. Suppose that at the start of a year, public debt in Australia is A\$500 billion, with three-quarters denominated in Australian dollars and a quarter in foreign currency. Suppose also that the rate of inflation in Australia in that year is 3 per cent and that the trade-weighted value of the A\$ falls by 1 per cent in the year. What are the implications for the real value of the debt at the end of the year and for government revenues?
6. What are the major price and quantity components of the growth of public expenditure over the last 40 years?
7. What economic factors may have driven the growth in public expenditures? What is the influence of these factors or other factors likely to be on public expenditure over the next 10 years?

Tutorial 3 Efficiency of Competitive Markets

1. What are the various meanings of efficiency in economics?
2. How are the utility possibilities frontier and the production possibilities frontier related? Why does the utility possibilities frontier matter?
3. Using partial equilibrium analysis, determine the quantity and price outcomes in a competitive market that produces shirts, assuming the supply of shirts is given by $Q^S = 20 + 4P$, and the demand for shirts is given by $Q^D = 65 - 5P$. Will this equilibrium outcome be Pareto efficient? If so, why?
4. The First Welfare Theorem claims that competitive markets result in a Pareto efficient outcome. Explain briefly why.
5. Anne and Ben may have quite different tastes for shirts and beer such that Anne wants a large number of shirts and Ben wants large quantities of beer, but at the margin they must be prepared to exchange the same amount of beer for a shirt. Explain this apparent paradox.
6. Suppose that if a manufacturing company gave up 3 units of capital it would require 2 units of labour to maintain the same level of output, while a food company would require 2 units of labour if it gave up one unit of capital. What is the marginal rate of substitution of inputs for each firm? Does this represent a situation of efficient production? Why/why not?
7. Suppose that an economy produces two goods, clothes and food. At current margins, consumers are willing to exchange four units of food for one unit of clothing and firms can produce one unit of clothing at the expense of two units of food. Is this an efficient allocation? To be efficient, should the economy produce more clothes or more food?
8. Airlines often charge passengers different prices for similar seats on the same flight. Is this consistent with exchange efficiency?
9. Consider an economy that produces clothes and bread. Explain why the economy will not produce an efficient mix of products if a tax is imposed on the consumption of shirts but not on bread.
10. Economists favour a Pareto improvement because it is always socially beneficial regardless of the form of the social welfare function. Discuss.

Tutorial 4 Individual and Social Welfare

- Why do individual preferences matter? Should they always be regarded as dominant? If there are to be exceptions, what are the grounds for these?
- Why is a demand curve regarded as information on an individual's total and marginal benefit from any good?
- How can demand curves be estimated?
- How does an individual's utility change as she moves along a demand curve (either up or down)? Is it possible to have a demand curve along which an individual's wellbeing does not change?
- Is it possible to aggregate the welfare of a group of individuals into an overall measure of social welfare? If so, how can this be done?
- Assume an economy with two people (Anne and Bruce).
 - Let the social welfare function be $W = U_a + U_b$ where U_a and U_b are the utilities of Anne and Bruce. Graph the iso-welfare curves (the social indifference curves). What is the relative importance attached to their well-being?
 - Repeat for $W = 2U_a + U_b$. What are the implications?
 - Draw a utility possibilities curve and show how the SWFs in (a) and (b) affect the desired outcome.
- What are the main weaknesses of the additive utilitarian social welfare function? How might these weaknesses be overcome?
- Define the compensation principle. What is the relationship between this principle and a potential Pareto improvement? What value judgements underlie the compensation principle?
- Three individuals (groups) have the following income, health and perceived utility.

	1	2	3
Income (\$ per annum)	20,000	40,000	80,000
Health	Good	Poor	Good
Utility	100	120	200

Government has six policy options (A to F), which give forecast income changes below.
 How would you rank the options?
 What does this imply about a social welfare function?
 What does it imply about compensation schemes?

Forecast income outcomes

Option	1	2	3	Total	Rank
A	+1000	0	-3000	-2000	
B	+500	+500	-2500	-1500	
C	+1500	-500	-500	+500	
D	+500	0	+500	+1000	
E	-100	+1100	0	+1000	
F	+1000	-250	+500	+1250	

Tutorial 5 Cost-Benefit Analysis

1. What are the main differences between cost-benefit analysis, cost-effectiveness analysis, and financial analysis?
2. What is the relationship between welfare economics and cost-benefit analysis?
3. Is the net present value always the best measure of project value? When might other measures of aggregate project value be preferred?
4. Consider two projects, A and B. Project A has a capital cost of \$100 million and Project B has a capital cost of \$20 million. Given an opportunity cost of capital of 7 per cent, A provides a NPV of \$30 million. B provides a NPV of \$10 million. Explain why A is better than B, although it costs five times as much and produces only three times the benefit.
5. What is an appropriate price for petrol in project appraisal? Domestic market price, market price less indirect taxes, export price, the opportunity cost of producing petrol locally, or some other price? How might the answer vary with circumstances?
6. What discount rate should be applied to assess policies to reduce greenhouse gas emissions and hence long-term global warming?
7. Why is it efficient to locate polluting industries in poor countries? What are the policy implications?
8. If the Pacific Highway were substantially upgraded and freight costs were reduced by 20 per cent, who would benefit? The trucking firms using the road? Firms sending freight? Consumers? Give reasons.
9. What is the difference between cost-benefit analysis and economic impact analysis? What are the dangers of economic impact analysis?

Tutorial 6 Public Goods and Externalities

1. Why is the lighthouse regarded as a classic public good? Could markets provide an efficient supply of lighthouses?
2. Why does Hardin view the village commons as a common property resource which will be misused if use is not regulated? Why may this be viewed as an externality?
3. How does the efficient provision of a pure non-excludable and non-rival public good differ from the efficient provision of an excludable but non-rival public good?
4. Explain why the optimal level of pollution is generally not equal to zero.
5. Council wants to determine how often to clean residential streets. It costs \$150 to clean a street. There are 20 houses in the street. Ten households have a demand for street cleaning equal to $q = 5 - 0.25p$. The other 10 households have a demand curve equal to $q = 5 - 0.5p$. Convert these demand curves into marginal benefit curves and estimate the efficient number of street cleanings per month.
6. Suppose there are two people in society. The demand curves for flu immunisation are represented by the equations $Q_A = 100 - P$, and $Q_B = 200 - P$. Suppose that flu immunisation is a non-exclusive public good, which can be produced at a constant marginal cost of \$50 per unit. Determine the following:
 - (i) The optimal level of flu immunisation
 - (ii) The level of flu immunisation that might be produced if production were left to the private sector. Does your answer depend on what each person assumes the other might do?
 - (iii) The cost of flu immunisation if government were to produce the optimal level.
7. Do relative earnings provide a revealed preference indicator of the value of an extra year of education?
8. Suppose that two firms make use of the local river in their production process. Firm A operates upstream, and faces marginal costs of 1.3 per unit. Firm B operates downstream of firm A, and faces marginal costs of 1.2 per unit. Suppose that production by firm A increases the marginal costs of firm B by 0.6 per unit of output. Determine the following:
 - (i) The social marginal cost of production of firm A
 - (ii) The tax that needs to be levied on firm A to produce a socially optimal production level of firm A in a competitive economy.
9. Can stated preference surveys be used to estimate individual preferences for leaving water in rivers compared with extracting the water for agricultural, industrial or residential use?

Tutorial 7 Efficient Public Services

1. In determining the role of government in supplying public services, why is it important to distinguish between the financial provision of services and the physical production of them?
2. What is a cost function? What are the various ways of estimating cost functions? What are their strengths and weaknesses?
3. What main difficulties arise in estimating average and marginal costs for a public agency?
4. Public and private sector costs are often compared using either 'before and after' studies or cross-section analysis. How are these methods applied? What issues might arise in assessing the relative costs of private and public production from these methods?
5. Suppose that you were asked to determine whether public or private buses operated at lower costs. What kind of data would you need? What kind of statistical model would you use?
6. In Australia, job search assistance has been contracted out to private organisations. What are likely to be the costs and benefits of this?
7. If government wishes to increase the use of childcare services, what is the best way to do so?
8. How would you measure the inputs, outputs and outcomes of police services? Is it possible to estimate the average and marginal costs of police outputs? Does this provide benchmarks for comparing the efficiency of police services?
9. When should government buy-in / contract out service provision? Give examples.
10. How can more control be given to users of publicly funded services? What are the advantages and disadvantages of giving users more control?

Tutorial 8 Pricing and Ownership

1. Many regulatory agencies, such as the Therapeutic Goods Administration, recover all or most of their costs. However, most information agencies, such as the ABS, recover only a small part of their costs.
 - (i) What principles should determine whether government agencies recover costs for services provided?
 - (ii) Should regulatory agencies aim to recover 100 per cent of their costs?
 - (iii) Should information agencies aim to recover some or all of their costs?
2. When is short-run marginal cost pricing efficient?
3. When does short-run marginal cost pricing lead to full cost recovery?
4. Suppose the government adopts a strategy of mark up pricing for a good. Demand for the good is given by $P = 50 - 2Q$. The government can produce at constant marginal costs of \$10 per unit. The government marks up goods by 20 percent. Determine the following
 - (i) The price and quantity under the mark-up pricing strategy
 - (ii) The efficient price and quantity combination
 - (iii) The deadweight loss that emerges as a result of the pricing strategy
 - (iv) Suppose that demand for the good becomes more inelastic. What do you think will happen to the size of the deadweight loss as a result of the mark up?
5. What incentives might make private firms more efficient than state owned enterprises? Why is market structure important to incentives?
6. The Australia Government currently owns 51 per cent of the shares in Telstra, the major telecommunications company in the country. What are the main arguments for and against the sale of this 51 per cent share to the public? What would you advise the government to do?
7. The Australian Rail Track Corporation (ARTC) is a Commonwealth-owned corporation with a charter to run at a profit. ARTC runs rail track in Victoria and South Australia relatively efficiently and has now has a lease to operate the major interstate rail lines in NSW. These rail lines were run at a loss by the NSW government Rail Infrastructure Corporation. Why might one state corporation run the rail more efficiently than another one? What factors should the NSW government have considered in deciding whether or not to accept the ARTC offer?
8. Do share prices post-privatisation tell us about the success or otherwise of the privatisation?
9. Suppose that government can fund a project by issuing bonds at 6 per cent (public funding) or equity finance on which lenders require a 10 per cent expected rate of return (private funding). Why might government prefer private funding to public funding despite the higher cost of capital? Does the interest rate differential represent a real economic cost of developing the project by private finance?
10. Is public ownership necessary for an equitable supply of basic household services?