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THE AUSTRALIAN NATIONAL UNIVERSITY

78/1975

FACULTY OF ECONOMICS

DEPARTMENT OF ECONOMICS

ANNUAL REPORT 1974

The Department has expanded rapidly over the past decade. In addition to the basic five-year coursework programme, covering the economics major, the honours year and the Master's course work, the Department gives undergraduate courses in

- mathematical economics
- labour economics
- agricultural economics
- transport economics
- resource economics
- economic policy.

The Department's courses are taken for all bachelors' degrees: special course structures exist for Science-Economics, Economics-Law, Economics-Asian Studies. Also, special course structures exist for scientists and other graduates wishing to transfer into the economics profession. In these several ways, the Economics Department has sought to meet the needs of a wide range of students. (It is however, a source of regret that the University has not pursued the proposal, emanating from this Department, for "sandwich courses" which enable an employed student to take leave from his job and become a full-time student in alternate semesters.)

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The Economics Department faces a number of issues in educational policy. One of these is its size. Any Department with an enrolment of a thousand students must consciously try to ensure that individual students do not feel they become just faces in the crowd. The Economics Department does, of course, maintain close tutor-student contact by keeping down tutorial class sizes. Whether this is sufficient to handle the problem is something of which the students themselves are probably the best judge.

However, any educator is aware of the problems associated with size. It seems certain that any economies of scale are exhausted by the time a Department has one thousand students - and indeed, various diseconomies have begun to appear precisely because it becomes difficult for lecturers to obtain adequate feedback response from their students. An obvious corollary of this is that the Economics Department should cease to grow further. There is no critical point of principle involved in accepting this proposition. For the existing entry restrictions (i.e. the H.S.C. mark) already prevent some students enrolling who would successfully take out a degree if enrolled. The fact that students debarred from enrolling, may now enrol at another tertiary institution means that there is no longer any reason for

postponing the introduction of measures which prevent the first year intake into the Department from rising any further. Indeed failure to take such measures must tend to depress the quality of education provided.

A second issue of policy is concerned with the emphasis or pre-eminence given to different parts of the subject in the economics major. This is presently a subject of debate around the world (refer *Economist*, 15.6.74), and is a debate which seems likely to continue. One possible resolution of this debate is for departments of economics to offer greater flexibility in student choice. Yet another possible resolution is for the provision of differently named degrees - reflecting the sort of specialisation (or lack of it) undergone by the student.

A third issue is concerned with methods of instruction. This Economics Department has traditionally had a very high ratio of students to staff and so has had to provide "mass education" based on an extremely economical use of staff. However, recent change in staffing formulae gives it the opportunity to experiment with less meagre teaching methods. More labour intensive methods are much more demanding on everybody involved, but they yield a better trained graduate.

A fourth issue - assessment methods - may be more apparent than real. On the one hand, the overwhelming majority of students accept the need for including examinations as an efficient and impartial part of their assessment. (In October 1974 in an Economics III class of some 150 students offered the option of replacing part of the weighting of the final examination by a term essay, only 8 students opted to do the essay.) On the other hand, considerable versatility exists in methods of assessment in the Department. In one unit this year, the students set the examination paper; in another the students could accumulate sufficient marks during the year to avoid doing the final examination paper; in yet another unit 50% of marks were given for project work. Assessment methods are changing quite rapidly as staff experiment with possible alternatives.

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Continuing low success rates of students in first year economics in 1973 led to plans for two innovations in 1974.

The first involved the introduction of work manuals integrating all aspects of the teaching process (lectures, tutorials, reading, problems and exercises) and thus giving close guidance to the student as to what is expected of him in each section of the course. The work manuals have been enthusiastically welcomed by students, and will be continued - albeit with substantial changes based on detailed responses from the students.

The second innovation, planned with the University Counselling Service in 1973, offered students the chance of meeting in small groups with counsellors and economics department staff to discuss their problems in handling university life. The groups began in February before the start of the academic year and continued well into first term.

These meetings with groups of about ten students in the informal atmosphere of the Counselling Centre were a useful opportunity for staff to get to know student feelings. And the fact that many students kept coming to these sessions indicated that they found them helpful. However, this innovation affected less than one-quarter of the total class.

Apart from these two changes, a sustained attempt was made to tabulate and analyse all known facts of the performance of each student - in the hope that this might indicate further useful innovations for 1975. This analysis yielded only two significant results, but they are of value:-

First, among students who did not perform especially well at the Higher School Certificate, are some whose schooling was interrupted by absence overseas during their two final school years. Some of these students are capable of doing very well at University - indeed, some of them move immediately into the group of top performers.

Second, a complete study of the intake from last year's NSW-
ACT Higher School Certificate students entering the class, indicated that the HSC mark of 600 is critical. For when in the seventh week of term a comprehension test was set on the first six weeks work : almost all of the 600+ students scored 80% or better. (These 600+ students accounted for one-third of the total group.) But in respect of the remaining two-thirds of students, seven out of ten students displayed comprehension problems ranging from mild to extreme. (The Department then mounted an extensive range of remedial tutorials for students in groups of five - and these were attended by more than one-hundred students.) It should be added, that in a further analysis of student performance by 25 mark groups in the HSC range 475 to 600, there was *no apparent gradation* : the proportion of students who did well in our test was as high in the 475 to 500 mark group as in the 575 to 600 group. This seems to confirm that 600 is a critical threshold.

Of course, the students gaining less than 600 in the HSC include many who will succeed. (Some of the students who had major comprehension problems early in the year, turned in fine results by the year's end.) It is generally accepted that academic success depends on strength of motivation - for which there is no known measure.

However, since it seemed that the 7th week comprehension test had sorted students into two groups (i.e. having/not having serious academic difficulty), it was worthwhile attempting to further subdivide the second group - if not by motivation, then at least by attendance as a possible indicator of motivation. This seemed the more worthwhile because lecture attendance was down 70% in the latter part of first term (a similar figure being reported for some other first year subjects); and by the start of third term attendance was to fall to barely over 60%. A detailed count of students attending the (randomly chosen) lecture on 8th May enabled a subdivision of the end-of-year performance of students who gained 60% or less in the 7th week test. The results are shown in the following table:

ECONOMICS I

END OF YEAR ASSESSMENT classified according to :
 Student achievement in the 7th week of the academic year,
 and attendance at a randomly chosen lecture.

	At the test in 7th week, student gained		
	More than 60%	60% or less	
		AT Lecture on 8th May, student was	
		Present	Absent
Total Number of Students	217	119	75
End of Year			
Passed	178 } 27 }	70 } 29 }	33 } 23 }
Failed			
Withdrawn	12	20	19
% passing among those who sat	87%	70%	59%

Note: The Table shows the final assessment of ALL students who sat a test in the seventh week. In the top half (i.e. 217 students), the pass rate among the 205 who finished the year was 87%.

If this Table poses more questions than it answers, the problem of formulating future educational policy is made even more difficult by the fact that the *total* of all recorded withdrawals (including those before the comprehension test) from Economics I was 169 students. The policy issues which do thrust forward are two:

1. Withdrawals and absentees : Is it possible to get more information to students sufficiently early so that they can make an informed choice as to which University course to pursue? Can we thus cut down the number of withdrawals and the number of disinterested absentees?
2. Secondly, might it be possible to lift the performance of the lower group of students closer to that of the top group? Is poor pre-University preparation a cause of lower success?

The first issue - the possible need for better advance information to students - had led the following action to assist the 1975 intake:

- i) In October 1974, the University distributed to potential entrants a small booklet "The Freshman Economics Student" drawing attention to the need for the student to seek adequate information (and showing how to go about it).
- ii) At the same time, four cassette television lectures were filed in the library of the language laboratory - entitled "Introducing Economics". These can be seen by the public during the summer, and will be used in induction and orientation programmes in February 1975.
- iii) Also in October 1974, the first Economics I Work Manual (wholly revised for 1975) was sent free by post to any potential entrant requesting it.

Whereas the cassette T.V. lectures provide a vignette of the first six weeks lectures, the first work manual gives a very precise statement of the first fortnight's work in March 1975. Thus students should be able to obtain a quite accurate idea of the content, level and volume of work expected of them.

The second issue - the possible need to aid ill-prepared students - has led to preparations being made (with the aid of the Dean of Students) for an experimental induction programme for a pilot group of fifty students, beginning February 17 1975 and lasting for one week. This induction programme focusses primarily, but not exclusively, on how to apply mathematical reasoning to economic problems.

The changes reported above are a part of a long-existing process of educational innovation and improvement. They are reported here in some detail so that the reader may better understand the operation of one of the University's largest departments. Fortunately, the opportunity exists to continue this process of educational improvement - e.g. the new course in social economics, and the opportunity to reduce class size.

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Examination Results

The following table shows enrolments (April figures) in the Economics major since 1967. The concluding two columns show the number of students sitting in November 1974 and the percentage of these who passed. (See also concluding Table at the end of this report.

Enrolments (April)									Sat Exam Nov. 1974	
Year	'67	'68	'69	'70	'71	'72	'73	'74	No.	% Pass
First Year (I & A)	322	405	451	468	529	443	428	527	394	79%
Economics II	88	104	133	187	175	233	230	216	184	88%
Economics III	64	87	86	114	155	175	189	186	167	99%

Student participation

Informal relations between staff and students have been very satisfactory. In common with the rest of the University, formal relations are being introduced in the form of staff-student subject committees, as well as electing students to the newly formed Departmental Committee (in anticipation of the new Departments Statute).

Postgraduate

There were 13 students enrolled in preliminary courses preparatory to seeking admission to the Master's course.

12 students were enrolled in the M.Ec coursework programme to which this Department contributes along with other participating departments.

3 students were working on their Master's theses:

Mrs J. Selby-Smith, "The Competitiveness of Japan, United Kingdom and the United States of America in the Australian Import Market". (Supervisor: Dr P. Drysdale).

Mr T.B. Roberts, "Flow of funds in underdeveloped export economy: the case of Papua and New Guinea". (Supervisor: Professor R.L. Mathews and Dr R. Shand). Degree awarded 1974.

Mr B.C.J. Hesketh, "Intra-Industry Trade in Asia". (Supervisor: Dr P. Lloyd).

13 students worked on Ph.D. Theses:

Mr J. Logan, "Optimal Growth in Neoclassical Models", (Supervisor: Professor J. Pitchford).

Miss J. Coat, "Taxation on the Mineral Industry", (Supervisor: Professor R. Mathews).

- Miss J. Hirst, "Foreign Capital Inflow", (Supervisor: Professor B. Cameron).
- Mr. N. Lam, "Export Instability and the Economy of West Malaysia and Thailand". (Supervisor: Dr P. Drysdale).
- Mr. N. Vousden, "The Economics of Exhaustible Resources: A Theoretical Contribution", (Supervisor: Professor J. Pitchford).
- Mr. T. Chisholm, "A Study of the Economic Effects of Taxation and other Fiscal Devices on Agricultural Production in Australia". (Supervisor: Professor R. Mathews).
- Mr. J. Gagg, "Australian Agricultural Commodity Policy 1929-1968 with particular reference to Wool, Wheat and Dairy Products". (Supervisors: Professor Sir John Crawford and Dr. P. Drysdale).
- Mr. N.V. Long, "International Capital Theory", (Supervisor: Professor J. Pitchford).
- Mr. F. Milne, "Theory of Finance, Bankruptcy and Risk". (Supervisor: Professor S. Turnovsky).
- Mr. D. James, "Income Distribution in Australia", (Supervisors: Professor B. Cameron, Professor R. Mathews).
- Mr. L. Witchard, "Optimal City Size". (Supervisor: Professor J.D. Pitchford).
- Mr. G. Kingston, "Inflation in an Open Economy". (Supervisor: Professor S.J. Turnovsky).

Staff List

During the year the Department was happy to welcome Dr Michael Porter and Mark Upcher, Rod Sims and Dennis Ahlburg. We lost Dr John Niland to a Chair in Sydney and Dr I. McLean to a Lectureship at Adelaide University. We look forward to the arrival of Dr Trivedi from Southampton in 1975, as well as to Mr N.V. Long joining us.

- Professors:** J.D. Pitchford, M.Com. (Tas), Ph.D. (ANU)
S.J. Turnovsky, M.A. (Well), Ph.D. (Harv).
B.D. Cameron, M.Ec. (Syd). Ph.D. (Cantab).
- Readers:** Dr. P. Drysdale, B.A. (NE), Ph.D. (ANU)
Dr. P. Trivedi, M.Sc. (Econometrics)(LSE), Ph.D.
- Senior Lecturers:** Dr C.T. Edwards, B.Com (Melb), Ph.D.
A.H. Chisholm, M.Ag.Sc. (NZ)
J. Logan, B.Com (Econ), (NSW Newcastle University College).
E. Sieper, B.Ec. (Syd).
Dr P.L. Swan, B.Ec. (ANU), Ph.D. (Monash)
Dr M.G. Porter, B.Ec. (Adel), AM, Ph.D. (Stan).

Lecturers:

O.G.P. Stanley, B.Ec. (Syd), Ph.D. (ANU)
 N. Vousden, B.A. (ANU)
 S.C. Bambrick, B.Ec. (Q'ld), Ph.D. (ANU)
 R.C. Cornes, M.Sc. (S'ton).
 A. Preston, B.Ec. (Q'ld), Ph.D. (ANU)

Senior Tutors:

Jill I. Coat, B.Ec. (Adel).
 D.W. James, M.Ec. (ANU)
 Miss J. Hirst, B.Ec. (Adel)
 D. Ahlburg, B.Ec. (Syd), M.Ec.
 M. Upcher, B.Ec. (Tas), M.Ec.

Tutors:

R. McLeod, B.Eng., B.A. (Melb)
 R. Sims, B. Com., (Melb), M.Ec. (ANU)

Departmental Activity

All senior members of the Department engage in a range of lectures and consultative activity outside the University. Professor Pitchford was absent on leave during the second semester to work on problems of population, resources and environment. During this period he also visited the United States to give a paper on inflation at Washington. Professor Turnovsky presented papers at Macquarie, New England and Queensland Universities as well as to the 4th Economists Conference (with Professor Pitchford) and to the Australian Mathematical Society. Dr Drysdale was appointed to a Readership, and continued his work with the Australia - Japan Project as well as consultative work for the Australian and Papua-New Guinea Governments. Dr Edwards took up his Leverhulme Award to work in South East Asia during the summer.

Many members of the department are engaged in lectures off campus. The range of their work is to be seen in their publications and in their research theses listed in this report.

Seminars

Visitors presenting papers at the Economic Theory seminars were:

Professor A. Asimakopulos (Monash University), "Kaleckian Theory of Income Distribution".

Professor P. Brown (University of Western Australia), "Dividend Policy Changes and the Value of the Firm".

Professor D.H. Pyle, (University of California and Faculty of Economics).

Dr. J. Freebairn (Economics RSSS), "Updating Single Equation Regression Models".

Professor J. Holmes (State University of New York at Buffalo and Monash University). "Portfolio, Keynesian Trade Models, and Speculative Capital Flows".

Professor E. Burmeister, (University of Pennsylvania and Faculty of Economics).

Publications

Ahlburg, D.A., "Determinants of Research and Development Performance of U.S. Affiliated Firms in the Australian Manufacturing Sector". Paper presented to Fourth Conference of Economists, Canberra, August 1974.

Bambrick, Susan C., "The Economic Background" - a chapter for the Special edition of *Search* (ANZAAS) on the Australian Mining Industry, Vol. 5, No.1-2, January-February 1974. Reprinted in *Searchlight* series, pp.17-23.

As editor: "Mineral Processing in Australia", Papers and Proceedings, Centre for Continuing Education, ANU, March 1974.

"Economic Nationalism and Resources Diplomacy" *Bankers Magazine*, April 1974, pp.302-304.

"BHP and the Economy", *BHP Journal*, 1/74, pp.8-13.

"Federal Government Intervention in the Price Mechanism, 1939-1949", *Australian Economic History Review*, March 1974, pp.1-19.

"The Future Role of Foreign Investment and the Multinational Corporation in Australia", in *Papers and Proceedings*, Conference on the Multinational Corporation and International Investment in Australia, Sydney University Extension Board, May 1974 (and also as Editor).

"The Economist as a Policy-maker", Peg McGoffin Memorial Lecture, Conference of Australian Federation of Business and Professional Women, Sydney, October 1974. (11 pages).

"The Australian Steel Industry in the Twentieth Century", Papers and Proceedings, Australian Steel Convention, (Melbourne, Victoria), October 1974, pp.85-93.

"Policy Issues for the Minerals and Energy Sector" Australasian Institute of Mining and Metallurgy, *Monthly Bulletin*, No.382, December 1974, pp.27-29.

"Mineral Processing in Australia: What Price Resources Diplomacy", 4th Conference of Economists.

- Coat, J.I., *Energy for the 1970's: Australian Resources, Requirements and Policy*, Australia Japan Economic Relations Research Project, Australian National University, Canberra, March 1974.
- The Guaranteed Price for Australian Crude Oil*, Paper delivered to Fourth Conference of Economists, Canberra, 17-23 August 1974.
- Drysdale, P.D., "Trends in World Trade and World Trade Policy", in Ross Garnaut (ed) *Foreign Economic Relations of Papua New Guinea*, New Guinea Research Bulletin No. 56, New Guinea Research Unit, Australian National University, Port Moresby and Canberra, 1974, pp.33-45.
- Long, N.V., "International Borrowing for Resource Extraction", *International Economic Review*, Vol.15, No.1, February 1974, pp.168-183.
- "The Theory of the Mining Firm and the Optimal Extraction of a Non-Renewable Resource", *Australian Economic Papers*, Vol.13, No.23, December 1974, pp. 293-297.
- Milne, F., "Corporate Investment and Finance Theory in Competitive Equilibrium", *Economic Record*, December 1974.
- Pitchford, J.D. *Population in Economic Growth*, North Holland, pp.280.
- The Economics of Population: An Introduction*, ANU Press, pp.100.
- Turnovsky, S.J. "A Bayesian Approach to the theory of Expectations", Reprinted in S.E. Fienberg and A. Zellner, *Studies in Bayesian Econometrics in Honor of Leonard J. Savage*, North Holland Publishing Company, Amsterdam, 1974.
- "The Stability Properties of Optimal Economic Policies": *American Economic Review*, March 1974, pp.136-148.
- "On the Role of Expectations of Price Change and Technological Change in an Investment Function", *International Economic Review*, June 1974, (with A. Ando, F. Modigliani, and R. Rasche), pp.384-414.

"On the Role of Inflationary Expectations in a Short Run Macroeconomic Model", *Economic Journal*, June 1974, pp.317-337.

"Technological and Price Uncertainty in a Ricardian Model of International Trade", *Review of Economic Studies*, April 1974, pp.201-218.

"An Analysis of Imported Inflation in a Short-Run Macroeconomic Model", *Canadian Journal of Economics*, August 1974 (with A. Kaspura), pp.355-380.

"Price Expectations and the Welfare Gains from Price Stabilization", *American Journal of Agricultural Economics*, November 1974.

Vousden, N., "International Trade and Exhaustible Resources: A Theoretical Model", *International Economic Review*, (15), February 1974, pp.149-167.

"Resource Scarcity and the Availability of Substitutes: A Theoretical Model", Fourth Conference of Economists, Canberra, August 1974.

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DEPARTMENT OF ECONOMICS' ANALYSIS OF STUDENT PERFORMANCE

1 Subject or unit	% of Number Enrolled				Percentage of Number Sitting																			
	2 Enrolled as at 30.4.74		3 Sitting		4 Wastage		5 Failure		6 Sitting		7 High Dist.		8 Dist.		9 Credit		10 Pass with Merit		11 Pass		12 Fail			
	No	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
Economics A	43	(100)	45	(105)	+2	(+5)	8	(19)	45	(100)	0	0	0	4	(9)	33	(73)	8	(18)					
Economics I	484	(100)	349	(72)	135	(28)	76	(16)	349	(100)	2	(.5)	10	(3)	11	(3)	63	(18)	187	(54)	76	(21.5)		
Economics II	216	(100)	184	(85)	32	(15)	23	(11)	184	(100)	1	(.5)	13	(7)	5	(2.5)	13	(7)	129	(70)	23	(13)		
Economics III	186	(100)	167	(89)	19	(11)	2	(1)	167	(100)	1	(.5)	10	(6)	5	(3)	27	(16)	122	(73)	2	(1.5)		
Labour Econs A	44	(100)	33	(75)	11	(25)	6	(14)	33	(100)	0	4	(12)	4	(12)	3	(9)	16	(49)	6	(18)			
Math. Econs. 1A	12	(100)	10	(83)	2	(17)	1	(8)	10	(100)	1	(10)	2	(20)	0	1	(10)	5	(50)	1	(10)			
Math. Econs. 1B	10	(100)	7	(70)	3	(30)	1	(10)	7	(100)	1	(14)	1	(14)	0	2	(29)	2	(29)	1	(14)			
Math. Econs. 11A	6	(100)	4	(67)	2	(33)	1	(17)	4	(100)	1	(25)	0	0	0	2	(50)	1	(25)					
Math. Econs. 11B	3	(100)	3	(100)	-		0		3	(100)	0	1	(33)	1	(33)	0	1	(34)	0					
Maths. For Econ.	27	(100)	15	(56)	12	(44)	2	(7)	15	(100)	1	(7)	0	1	(7)	0	11	(73)	2	(13)				
Resource Economics	35	(100)	31	(89)	4	(11)	0		31	(100)	2	(7)	5	(16)	14	(45)	0	10	(32)	0				
Economic Policy [Stab. Policy]	8	(100)	5	(63)	3	(37)	0		5	(100)	1	(20)	1	(20)	3	(60)	-	-	-					
Transport Econ.	38	(100)	50	(+132)	+12	(-32)	5	(13)	50	(100)	6	(12)	2	(4)	6	(12)	10	(20)	21	(42)	5	(10)		

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	<u>Enrolled</u> (as at 30 April 1974)	<u>Sitting</u>	<u>Results</u>
Final Honours	8	8	2 Class I Honours 5 Class IIA Honours 1 Class IIB Honours
Masters Qualifying	8	8	4 Reached required standard to continue 4 Failed to reach required standard to continue
Masters Degree	3		
Ph.D.	13		
