

ECONOMIC RESEARCH CENTRE
Department of Economics
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CENTRE FOR ECONOMIC POLICY RESEARCH
Division of Economics and Politics
Research School of Social Sciences
Australian National University

Report on

Ph.D. CONFERENCE IN ECONOMICS AND BUSINESS
NOVEMBER 1991
PERTH

by

Claire O'Sullivan
Department of Economics
The University of Western Australia



November 1991

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* I would like to acknowledge the help of Daranee Chenhall and Ken Robertson.

The fourth Ph.D. Conference in Economics and Business was held in Perth recently, bringing together postgraduate students from Australia and New Zealand, and many prominent academics, some of whom who acted as discussants. The Conference was jointly organized, for the first time, by the Economic Research Centre of The University of Western Australia, and the Centre for Economic Policy Research of The Australian National University. Some 21 papers were presented in two days, and there was considerable debate at all sessions, providing a forum in which Ph.D. candidates could benefit from the depth of experience of the other participants.

A reception was hosted by the Western Australian Branch of the Economic Society of Australia, and participants were welcomed by Associate Professor Philip Maxwell, President of the WA Branch. The Conference was officially opened by The Vice-Chancellor of UWA, Professor Fay Gale.

Dr Adrian Blundell-Wignall, Reserve Bank of Australia, and a graduate of UWA, delivered a special lecture which examined The Relevance of Modern Macroeconomics to Policy Making in OECD Countries, and outlined the implications of financial deregulation for macroeconomic outcomes, drawing on research completed by him while at the OECD. This address is very topical in this post-deregulation era in Australia, and inspired a lively discussion. Members of the WA Branch of the Economic Society were invited to attend this lecture.

The Conference dinner closed the proceedings. The speaker, Professor Robert Gregory, drew attention to some remarkable facts, including the different pace of job creation in the male and female workforces in Australia. He gave a fascinating insight into the changing nature of income distribution in Australia. During the last forty years, employment has become increasingly concentrated in (i) the top one-third of occupations (by hourly earnings for males); and (ii) the bottom third of occupations.. The greater concentration of workers into “good jobs” and “bad jobs” has occurred as the proportion in “middle jobs” declines.

Appendix 1 gives the programme for the Conference and the abstracts for papers are contained in Appendix 2. Appendix 3 is a list of participants. The Conference attracted attention from the wider community, and some press clippings are presented in Appendix 4.

The following institutions provided generous financial support for the Conference:

Agricultural Economics Society of Australia
Alcoa of Australia
AMC Mineral Sands
Argyle Diamonds Mines
Australian Bureau of Agricultural and Resource Economics
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Australian Equipment Lessors Association
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The University of Western Australia
Town and Country Bank
Treasury Department of Western Australia
WA Farmers Federation
WA Ministry of Education
WA Office of Economic Liaison and Regulatory Review
Water Authority of Western Australia
Western Collieries
Westrail
Woodside Offshore Petroleum
Worsley Alumina

APPENDIX 1

THE PROGRAMME

OPENING SESSION

Opening address by Professor Fay Gale, Vice-Chancellor,
The University of Western Australia

SESSION 1: INTERNATIONAL ECONOMICS

Chairperson: Ken Clements, Economic Research Centre, Department of Economics,
The University of Western Australia

Jacqueline Dwyer, Division of Commerce and Administration, Griffith University, *“The Tradeable Non-tradeable Dichotomy: A Practical Approach”*

Sandra Hopkins, Department of Economics, The University of Tasmania, *“The Risk Premium in a Portfolio Balance Model”*

Discussants: Robert Gregory, Centre for Economic Policy Research,
The Australian National University

Richard Snape, Department of Economics,
Monash University

Jeffery Carmichael, School of Business,
Bond University

SESSION 2: FINANCE

Chairperson: H.Y. Izan, Department of Accounting and Finance,
The University of Western Australia

Raymond Da Silva Rosa, Department of Accounting and Finance, The University of
Western Australia, *“An Investigation of the Size Effect Anomaly on the Abnormal Returns to Firms Involved in Corporate Takeovers”*

Jocelyn Dehnert, Australian Graduate School of Management, The University of New
South Wales, *“The Determinants of the Size of Equity Issue Announcement Effects”*

Discussants: Terry Walter, Department of Accounting,
The University of Sydney

Robert Officer, Graduate School of Management,
The University of Melbourne

SESSION 3: GENERAL EQUILIBRIUM

Chairperson: Takashi Takayama, Department of Economics, The University of Western
Australia

Sang Hee Han, Department of Econometrics, The University of Sydney, *“A General
Equilibrium Econometric Model for a Small Open Economy with
Application to Australia”*

Micheal Malakellis, Industry Commission and IMPACT Research Centre, Monash
University, *“An Intertemporal Prototype of the ORANI Model”*

Discussants: Alan Powell, IMPACT Research Centre,
Monash University

Geoffrey Kingston, Department of Economics,
The University of New South Wales

SESSION 4: SPECIAL LECTURE

Chairperson: Robin Ghosh, Department of Economics,
The University of Western Australia

Adrian Blundell-Wignall, Economic Research Department, Reserve Bank of Australia,
*“The Relevance of Modern Macroeconomics to Policy Making in OECD
Countries”*

SESSION 5: FINANCIAL ECONOMETRICS

Chairperson: Michael McAleer, Department of Economics,
The University of Western Australia

Robert Brooks, Departments of Econometrics and Economics, Monash University, *“The
Unbiased Prediction Hypothesis in Futures Markets: A Varying
Coefficient Approach”*

John Hin Hock Lee, Department of Econometrics, Monash University, *“Information
Efficiency and Volatility: An Application of the ARCH Process”*

Discussants: Kim Sawyer, Faculty of Economics and Finance,
Royal Melbourne Institute of Technology

Ronald Bewley, Department of Econometrics,
The University of New South Wales

SESSION 6: DEVELOPMENT ECONOMICS

Chairperson: Abu Siddique, Department of Economics,
The University of Western Australia

Myrna Austria, National Centre for Development Studies, The Australian National
University, ***“The Economic Performance of the Philippines in
Comparison with Other Middle Income Countries”***

Soonthorn Chaiyindeepum, Department of Economics, RSPS, The Australian National
University, ***“Energy Price Shocks and the Real Exchange Rate
Adjustments in the Philippines and Thailand”***

Discussants: Sisira Jayasuriya, Department of Economics,
La Trobe University

Tom Nguyen, Division of Commerce and Administration,
Griffith University

SESSION 7: LABOUR ECONOMICS

Chairperson: Charles Mulvey, Department of Industrial Relations,
The University of Western Australia

Anne Hawke, Economics Program, RSSH, The Australian National University, ***“Male-
Female Wage Differentials - How Important is Occupational
Segregation?”***

Paul Grimes, Department of Economics, RSSH, The Australian National University,
“Women and Australian Trade Unions”

Discussants: Michael Kidd, Department of Economics,
University of Tasmania

Tom Karmel, Commonwealth Department of Employment,
Education and Training

SESSION 8: IMPERFECT COMPETITION, MIGRATION, etc

Chairperson: Frank Harrigan, Department of Economics,
The University of Western Australia

He-ling Shi, Department of Economics, Monash University, "*A Dynamic Model of Nonperfect Competition*"

Jeff Petchey, Department of Economics, The Faculties, The Australian National University, "*Free Migration, Externalities and Interstate Transfers in a Federal Economy*"

Discussants: Ross Milbourne, Department of Economics,
The University of New South Wales

Jonathan Pincus, Department of Economics,
The University of Adelaide

SESSION 9: ECONOMETRIC THEORY

Chairperson: Darrell Turkington, Department of Economics,
The University of Western Australia

John Small, Department of Economics, University of Canterbury, "*The Exact Powers of Some Autocorrelation Tests When the Disturbances Are Heteroscedastic*"

Dongling Chen, Economic Research Centre, Department of Economics, The University of Western Australia, "*Undersized Samples and Demand Analysis*"

Discussants: Ray Byron, School of Business,
Bond University

David Giles, Department of Economics,
University of Canterbury

SESSION 10: QUANTITATIVE ECONOMICS

Chairperson: David Treloar, Division of Economics, Commerce, Education and Law,
The University of Western Australia

Komet Mangiri, Division of Asian and International Studies, Griffith University, "*The Estimation of the Elasticity of Substitution for 25 Manufactured Products of Indonesia*"

Daniel Gschwind, Department of Economics, The University of Queensland, ***“A Focus on Linkages: An Alternative Analysis of Tourism”***

Discussants: Keith McLaren, Department of Econometrics,
Monash University

Philip Adams, Centre of Policy Studies,
Monash University

SESSION 11: CHINA

Chairperson: Juerg Weber, Economic Research Centre, Department of Economics,
The University of Western Australia

MengXin, National Centre for Development Studies, The Australian National University,
“Can Individual Wages in Chinese Rural Enterprises be Explained by Human Capital Theory?”

Zhongdong Shan, School of Economic and Financial Studies, Macquarie University,
“The Role of Foreign Capital in China and LDCs”

Discussants: Joseph Chai, Department of Economics,
The University of Queensland
Hal Hill, Department of Economics, RSPS,
The Australian National University

SESSION 12: INTERNATIONAL MACROECONOMICS

Chairperson: Pamela Statham, Faculty of Economics and Commerce,
The University of Western Australia

Cha Dong Kim, Department of Economics, The Faculties, The Australian National
University, ***“Timing of Trade Liberalization, Capital Accumulation and Current Account”***

Discussant: Richard Snape, Department of Economics,
Monash University

CONFERENCE DINNER

Speaker: Professor Robert Gregory, Centre for Economic Policy Research, RSSS,
The Australian National University

APPENDIX 2

THE ABSTRACTS

THE ECONOMIC PERFORMANCE OF THE PHILLIPINES IN COMPARISON WITH OTHER MIDDLE INCOME COUNTRIES

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This paper shows through a pooled cross-section and time series analysis that differences in growth performance among middle income countries can be explained not only by differences in factor inputs, but by non-factor inputs as well. Specifically, exports promote faster economic growth through the positive externalities they generate to the non-export sectors of the economy and through the higher marginal productivities of factors in the sector. Technological catch-up shows convergence in the non-export sector but a divergence in the export sector is statistically insignificant. It was also found that the average growth performance of the Philippines for the period 1960-85 was below the average of middle income countries in contrast to the favourable growth record of other ASEAN countries. During the periods when the Philippines performed above the average of the sample countries, the poor relative performance of investments and exports negated the positive contributions of other growth factors. Although productivity growth in the Philippines was above the average, it was lower than other ASEAN countries, and it was declining.

THE UNBIASED PREDICTION HYPOTHESIS IN FUTURES MARKETS: A VARYING COEFFICIENT APPROACH

Robert D Brooks
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The testing of weak form efficiency of futures markets is usually done by testing whether the futures price is an unbiased predictor of the future spot price. Conventionally this is based on the estimation of a constant coefficient model. This paper considers the possibility that a varying coefficient model may be more appropriate, and the implications that certain varying coefficient models have for the efficiency hypothesis. Testing for the presence and form of a varying coefficient model is done using the class of point optimal tests. The analysis was carried out with data for the three most heavily traded futures markets contracts on the Sydney Futures Exchange.

**ENERGY PRICE SHOCKS AND THE REAL EXCHANGE RATE
ADJUSTMENTS IN THE PHILLIPINES AND THAILAND**

Soonthorn Chaiyindeepum
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It is argued that the energy terms of trade shock that the developing countries were facing in the 1970s affected their external balance and this led to their poor macroeconomic performances. Although this argument is well-founded, it is also equally valid that the poor performance was rather caused by the wrong policy in response to the shock. In this paper the relationship between the real exchange rate and the energy terms of trade shock is analysed to cast light on how the external balance is affected by the shock. It also analyses how the inappropriate fiscal policy may further deteriorate the external balance. The model is applied to the case of the Phillipines and Thailand to see whether the difference in their economic performance in recent years is largely attributable to the different adjustment in the real exchange rate or to inappropriate fiscal policy.

UNDERSIZED SAMPLES AND DEMAND ANALYSIS

Chen Dongling
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This paper estimates a demand system for the world as a whole by using cross-country data. As the number of goods is large relative to the number of countries, the sample is undersized and the usual GLS estimators are undefined. Various specifications of the disturbance covariance matrix are investigated as solutions to the problem. On the basis of unbiasedness, efficiency and robustness, the preferred covariance matrix is that obtained from the preference independence version of the demand system. The results also reveal that the matrix suggested by de Boer and Harkema (1986a) performs creditably, especially when it is corrected for small-sample bias.

**THE DETERMINANTS OF THE SIZE OF EQUITY ISSUE
ANNOUNCEMENT EFFECTS**

Jocelyn Dehnert
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In Australia all seasoned equity issues are made via rights issues. We observe both underwritten and non-underwritten issues where the rights are either renounceable or non-renounceable. The aim in this paper is to explain these issue choice decisions, and to establish their role in determining the size of the equity issue announcement reaction. We model equity issues via rights and focus on two issue characteristics: underwriting and the renounceability of the rights. If rights issues are taken up and held by existing shareholders the adverse selection problem as described in Myers and Majluf (1984) is reduced. In the model new shareholders are only introduced to the firm through shareholder sales of rights, or the underwriter take up of undersubscriptions. We develop two models; in the first we assume that the manager's objective function is to maximize the value of current shareholders' wealth, given the investment opportunity the firm faces and issue costs: in the second we assume the manager's objective function is to maximize the gains to the owner manager from the issue. We derive testable hypotheses and present empirical results.

**THE TRADEABLE NON-TRADEABLE DICHOTOMY:
A PRACTICAL APPROACH**

Jacqueline A Dwyer
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The distinction between the traded and non-traded goods sectors is central to the so-called 'Australian model'. While in principle the difference between traded and non-traded goods is clear-cut, in practice it is not. In this paper, a system is developed with which to identify traded and non-traded goods. It is applied to input-output data for Australia. Corresponding 'actual' prices of traded and non-traded goods are then compiled to form estimates of the competitiveness of the traded goods sector and its exportable and importable subsectors. The usefulness of these indicators of competitiveness is discussed with respect to trade flows and resource flows.

WOMEN AND TRADE UNIONS

Paul Grimes
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In Australia, women are almost 25% less likely to become union members than men. There are two general explanations for this: (i) women have different 'tastes' for membership than men; (ii) women are concentrated in those jobs which are characterised by lower rates of unionisation for all workers irrespective of gender. In this paper, separate membership equations are estimated for men and women in order to determine how much of the gender membership differential can be attributed to each of these explanations. The empirical analysis utilises a rich data set taken from a national survey conducted by the Office of Multicultural Affairs in 1988.

A FOCUS ON LINKAGES: AN ALTERNATIVE ANALYSIS OF TOURISM

Daniel Gschwind
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From a theoretical perspective and for the purpose of practical analysis, tourism remains ill defined. An established method of economic assessment of tourism is discussed, namely input-output analysis. The paper suggests that even the addition of techniques like the contingent valuation method does not provide a comprehensive framework for tourism. The fragmented nature of the current procedures for assessment may have adverse effects on policy development. A detailed study of yacht charter in Queensland is used to describe tourism as a system of relationships, rather than a narrowly defined industry. These linkages are then cast into a linear programming model and used as constraints on an income maximising function.

A GENERAL EQUILIBRIUM ECONOMETRIC MODEL FOR A SMALL OPEN ECONOMY WITH APPLICATION TO AUSTRALIA

S H Han
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The University of Sydney
SYDNEY NSW 2006

A general equilibrium econometric model, which is consistent with microeconomic optimization behaviour, is developed and estimated. For both the consumption and the

production sectors of the Australian economy the wage rates, price of consumption goods, and consumer incomes are endogenized in the model. A reparameterized AIDS and a Translog variable profit function are specified to estimate (i) supply and demand elasticities of consumption goods and labour; (ii) supply elasticities of the investment, export, and import goods. The model can also be used to generate economy-wide simulations for various tax policies. Utilizing quarterly Australian data from September 1966 to December 1990, the model is estimated by iterative SUR, iterative 3SLS, and FIML. The Hausman tests support the endogenous treatment of wage rates and price of consumption goods in the model. The relative forecasting performance of the three estimators also supports the endogenous role of the two prices. In particular, the FIML results satisfy the necessary signs for the curvature conditions in both sectors over the whole observation period.

MALE-FEMALE WAGE DIFFERENTIALS -- HOW IMPORTANT IS OCCUPATIONAL SEGREGATION?

Anne Hawke
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Most studies on wage differences between men and women concentrate on either unequal pay for equal work or occupational segregation. This study combines both these elements in a single model allowing us to account for differences in both the occupational distribution and wages between men and women, using several approaches. From this analysis we are able to determine a measure of the percent wage differential attributable to differences in endowments and the unexplained differences resulting from within and across broad occupational ranges. This measure is more appropriate than the conventional measure which places little importance on occupational segregation. Further, this approach is extended to a cross country study in order to determine the magnitude for institutional factors in the determinants of gender wage differentials. The data used for this analysis is the 1986 Income Distribution Survey of Australia and the 1987 Current Population Survey of the United States.

THE RISK PREMIUM IN A PORTFOLIO BALANCE MODEL

Sandra Hopkins
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Failure of asset market models to explain movements in floating exchange rates has led to a literature that attempts to explain that failure. One explanation focuses on the role of the

risk premium. In particular, a risk premium that varies overtime leads to coefficient instability in the models and therefore poor explanatory power. This paper considers the risk premium in a portfolio balance asset market model framework, and examines the relationship between changes in the risk premium over time and the intervention behaviour of the central bank.

TIMING OF TRADE LIBERALIZATION, CAPITAL ACCUMULATION AND THE CURRENT ACCOUNT

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This paper discusses the effects of the timing of trade liberalization on investment, and thus capital accumulation, and the current account using an intertemporal optimizing framework. An immediate and permanent tariff reduction is shown to enhance capital accumulation in the exportable industry. Converse outcomes may be generated in the importable sector. In determining the dynamics of the transition following temporary reform, the time horizon of temporariness is shown to be a key factor. It is shown that as the degree of temporariness of tariff reform becomes higher, investment in the exportable industry becomes smaller, and the deterioration of the current account is smaller. Nevertheless, the net effect on the current account is ambiguous.

INFORMATION EFFICIENCY AND VOLATILITY: AN APPLICATION OF THE ARCH PROCESS

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There is considerable evidence in the literature recently to suggest that the volatility of asset returns is not stationary over time. In addition, many studies have documented significant increases in the variance of asset returns, around the time that information that is relevant to this asset was released. This volatility is seldom taken into account in tests of market efficiency. The failure to incorporate this behaviour in these tests may significantly weaken any conclusion made about market efficiency. In this paper, the Australian foreign exchange and share market volatilities are analyzed using autoregressive conditional heteroscedasticity (ARCH) processes. We test whether these market volatilities are conditional heteroscedastic, and examine their behaviour around the time the balance of payments announcements are made. We further extend this study to test the efficiency of both markets to these announcements in a time-varying volatility framework.

AN INTERTEMPORAL PROTOTYPE OF THE ORANI MODEL

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The ORANI model of the Australian economy [Dixon, Parmenter, Sutton and Vincent (1982)] has been used extensively to analyse issues involving the composition of the economy. ORANI is essentially comparative static in nature; thus it does not project the trajectory of the economy between the initial point at which a shock occurs and its new equilibrium configuration. Even in the forecasting version of ORANI, ORANI-F [Parmenter (1988)], the dynamics are limited to average growth rates over the length of run simulated. The usefulness of intertemporal applied general equilibrium models is well documented (see for example Dixon (1990), Dixon and Parmenter (1990) and Dixon, Parmenter, Powell and Wilcoxon (forthcoming)). The purpose of this paper is to describe a computational approach to an intertemporal elaboration of ORANI. This implementation is motivated by the work of Dixon and Parmenter (1990). The prototype model described here offers the prospect of comparative dynamic simulations with a detailed applied general equilibrium model.

**THE ESTIMATION OF ELASTICITY OF SUBSTITUTION
FOR 25 MANUFACTURED PRODUCTS OF INDONESIA**

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This paper estimates the substitution rate between the domestic and imported manufacturing products for 25 major industries of Indonesia. Three model were applied: the Constant Elasticity of Substitution Model, the Conventional Demand Model, and the Approach Model. To eliminate the simultaneous bias, the demand and supply equations were estimated simultaneously. The method of estimation used was Two-Stage Least Squares, where the prices of domestic and imported products were estimated first and the demand equation second. Quarterly data from 1981 to 1988 were used. The results show that eight of the products have a zero elasticity of substitution, four have values of less than one, and thirteen have values of one or more.

**CAN INDIVIDUAL WAGES IN CHINESE RURAL ENTERPRISES
BE EXPLAINED BY HUMAN CAPITAL THEORY?**

Meng Xin

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China's market-oriented economic reform has brought significant changes to the Chinese economy. The development of rural township, village and private enterprises is one of the most remarkable achievements. The TVP firms operate in a more competitive environment compared to the state sector. However, they are still restricted by many economic and social-political constraints, particularly those set by the local community authorities. This study applies the human capital theory to investigate the determination of individual wages in the TVP. It is found that, unlike most developed and developing countries, educational background seems to play no role in TVP's individual wage determination, while experience plays a very important role. However, the importance of the experience varies between different employee groups (staff and workers) when it is subdivided into firm-specific tenure, other non-agricultural experience and agricultural experience. The agricultural and other non-agricultural experience play an important role in staff's wage determination, while firm tenure dominates other experiences in workers' wage determination. Apart from these findings, a comparison of experience-earning profiles among TVP's, the US and the Japanese labour market shows that the TVP worker's profile in aggregate is similar to that of the US despite the fact that in terms of employment tenure, the Chinese system is more like that of the Japanese.

**FREE MIGRATION, EXTERNALITIES AND INTERSTATE TRANSFERS
IN A FEDERAL ECONOMY**

Jeff Petchey

Department of Economics, The Faculties
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Tiebout (1956) attempted to show that free migration would lead to efficiency in the provision of local public goods in federal economies. However, the 'fiscal externality' literature has shown that the presence of 'fiscal externalities' and regional rents implies that free migration may not be efficient and that welfare-improving fiscal equalisation grants can be used to 'correct' for these inefficiencies. However, this analysis has not taken into account local public good externalities. In this paper, a model is developed to show that local public good externalities (i) interact with fiscal externalities and modify the standard results; (ii) reduce provision of local public goods below the socially optimal level; (iii) influence the fiscal equalisation transfers designed to correct for migration inefficiencies, and (iv) mean that two policy instruments are required to maximise welfare in a federal system: fiscal equalisation transfers to correct for the inefficiency of

free migration (which may not need to be made by a central authority) and matching grants to correct for underprovision of local public goods (which may need to be made by a central authority).

THE ROLE OF FOREIGN CAPITAL IN CHINA AND LDCs

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The role of foreign capital as a determinant of domestic saving and economic growth in LDCs is a controversial subject. The traditional view has been challenged by a number of empirical and theoretical works. Many economists have applied econometric models in testing quantitatively the role of foreign capital in LDCs, but no unanimous conclusion in support of rejection of the traditional view can be drawn from these studies. This paper contributes to the debate by developing a simultaneous equations model, and applying a rigorous estimation technique developed by Baltagi using pooled time-series and cross-section data. Two separate but related studies were undertaken involving a LDC model and a China model. These two studies have significantly improved previous studies in two respects. Firstly, by applying Baltagi's estimation technique in the pooling of time-series with cross-section data in simultaneous equations models, the coefficients estimates are more reliable. Secondly, a rigorous econometric assessment of the role of foreign capital in China has been undertaken; this has not been achieved in previous studies. The empirical results from the LDCs model and the China model have some common conclusions. Both models indicate that domestic resources contribute most to economic growth in LDCs. Foreign capital is not a sufficient condition for development.

A DYNAMIC MODEL OF NONPERFECT COMPETITION

He-ling Shi
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This paper constructs a dynamic model which illustrates the existence of an equilibrium with a Keynesian model of imperfect competition. The model has short-run Keynesian properties. In the medium-term, markets clear. The long-run equilibrium of the model is characterised by a steady-state in which there is endogenous capital accumulation.

**AN INVESTIGATION OF THE SIZE EFFECT ANOMALY ON THE
ABNORMAL RETURNS TO FIRMS INVOLVED IN CORPORATE
TAKEOVERS**

Raymond da Silva Rosa
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The University of Western Australia
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The inconsistent abnormal returns registered by bidding firms across numerous event-studies of takeover are puzzling when contrasted with the virtually unanimous finding that target firms obtain strongly positive abnormal returns on announcement of a takeover bid. Given that bidding firms are typically several times larger than their targets, this paper tests the well documented 'size-effect' as a possible explanation for the asymmetrical returns to bidder and target firms. The results indicate (i) that the size-effect is the probable cause of the secular decline in successful bidder firms' abnormal share returns post-merger, and (ii) that the divergent results of two major Australian studies on the effects of takeover are attributable to sample selection bias. On the whole, the evidence is consistent with corporate takeovers being value-maximising investments.

**THE EXACT POWERS OF SOME AUTOCORRELATION TESTS
WHEN THE DISTURBANCES ARE HETEROSCEDASTIC**

John P Small
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This paper considers the exact finite sample powers of five popular tests for AR (1) disturbances when one of several types of heteroscedasticity is also present. Severe reductions in power are found, particularly under strong positive autocorrelation. Factors influencing these power reductions are identified analytically and the limiting powers are also considered.

APPENDIX 3

THE PARTICIPANTS

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APPENDIX 4

THE WEST AUSTRALIAN MONDAY NOVEMBER 11 1991

Experts call for faster economic reforms

LEADING academic economists have unanimously endorsed the deregulation of financial markets and called for an acceleration of micro-economic reform.

The views of 23 senior economics faculty members and 15 top PhD students at 15 Australian and New Zealand universities were polled last week in Perth, where they gathered for the annual PhD conference in economics and business.

The conference is the brainchild of Professor Ken Clements, director of the University of Western Australia's Economic Research Centre, which was joined this year for the first time by a co-sponsor, the Centre for Economic Policy Research at the Australian National University.

By LOUIS BECKERLING
Economics Writer

Around half the delegates at the conference responded to a questionnaire which sought their views on a wide range of issues. Singular features of the outcome included the massive approval rating given to deregulation, criticism of the slow pace of micro-economic reform, and solid votes in favour of unrestricted access by domestic borrowers to offshore capital markets — despite the level of international indebtedness.

Lending further weight to the "free market" tenor of the responses was a vote against the view that immigration contributed to unemployment.

Opinions were not quite as

solidly behind a broad-based goods and service tax, though 70 per cent of respondents favoured it.

The group was split more or less evenly between traditional Keynesians and supply-siders, with 11 responses favouring monetary or fiscal expansion to help bring the recession to an end, while nine voted in favour of accelerating micro-economic reform as an alternative.

A notable feature of the forecasts which respondents were asked to make was a sceptical view on the ability of policymakers to lock in inflation at 2 per cent or below.

Though the annualised rate of inflation measured over the past six months has dropped to 1.6 per cent and the 12-month underlying inflation rate is down

to 3.3 per cent and widely expected to keep falling, respondents targeted a 4 per cent annual rate of inflation by June next year.

Consistent with a forecast of almost flat GDP growth, unemployment was not expected to change much, and remain at 10.3 per cent by June next year.

The respondents saw room for further interest rate relief and forecast a yield of 8.9 per cent on 10-year bonds by June next year — down another one percentage point from present levels.

Of some comfort to farmers and the exporting community, the dollar was forecast to show a further decline and the target for June next year was around US74.4¢ from its present levels of around US78.2¢.

THE WEST AUSTRALIA MONNDAY NOVEMBER 11 1991

Grim foreign debt 'will take years to clear'

HAULING down Australia's mountainous pile of foreign debt will take many years and require a major structural realignment in the economy in favour of a bigger traded goods sector, according to an expert.

Economic researcher Jacqueline Dwyer believes a key trigger to such a process will come from internal price signals — measured between the traded and non-traded sectors of the economy — rather than the price competitiveness of Australian products abroad.

Ms Dwyer's research suggests that returns available to investments made in the non-traded goods sector of the domestic economy often outperform returns available to investments made in the traded goods sector.

And as long as this remains true, resources will naturally flow into the former rather than the latter.

On past record, this means that precious investment capital will continue pouring into such things as commercial and residential property, the finance sector, and personal recreation; while investment in agriculture, manufacturing, mining and import replacement will take its place in a long queue.

But happily for those who are concerned about the current account imbalance and foreign debt, the past may not necessarily remain a reliable guide to the future — and gains made in the battle against inflation could help reverse these flows.

Ms Dwyer presented her views on the "Tradeable non-tradeable dichotomy" at the 1991 PhD Conference in Economics and Business in Perth last week.

The motivation behind Ms Dwyer's work was that sharp currency depreciations had

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not helped correct the current account deficits during the 1980s and the lingering suspicion that analysts were looking at the wrong signals, in focusing on exchange rates rather than looking at domestic prices faced by Australian firms.

Her research not only established that relative price signals steered investments away from the traded goods sector and into the non-traded area, but ominously for those who are relying on the investments already made in the 1980s to help trade Australia back into the black in the 1990s, it suggests that the traded goods sector is much smaller than is commonly assumed.

This begs the question as to where this leaves public policy responses to the current account deficit.

Australia has a small open economy with limited power to influence the price of its traded goods, and exporters must therefore by and large accept world prices.

But it can influence the price of non-traded goods, which ideally should be lowered relative to the price of traded goods and hence help shift the price signal in favour of traded goods.

In this regard the windfall gains made against inflation during the present recession can be expected to help, and while no one wants to see the recession extended, more of the same in terms of an anti-inflation campaign is likely to provide the best remedy to the current account imbalance.