

Message from the Head

This is the final opportunity for me to introduce the annual QED Newsletter since my term as Head of the Department expires this summer. As with the previous four years (has it been that long?), this one has been extremely satisfying both in terms of the range of activities of the Department and in terms of its development. The most pleasant development for me to report is the announcement of my successor. Doug Purvis has agreed to take on a term as Head beginning 1 July 1987. Doug will come to the position not only with an enviable record as a well-known scholar and policy advisor but also considerable administrative experience. He has been Director of the John Deutsch Institute for the Study of Economic Policy since its inception as a university institute and has been responsible for launching its highly-successful series of Policy Forums and Roundtables. For the past year, he has been Clifford Clark Visiting Economist in the Federal Department of Finance, a task which involves advising the Minister and Deputy Minister of Finance on economic policy. He will continue in that post for the remainder of 1986. Then, in preparation for the burdens of office, he will be on six months sabbatical from January 1987. Gordon Sparks will serve as Acting Head for the academic year 1986-87. Anyone who has gone through Queen's over the past two decades will have known Gordon in one of his various capacities as Chairman of Graduate Studies, Chairman of Undergraduate Studies, monetary economist, thesis supervisor (he leads the faculty for number of Ph.D. theses supervised) and hockey player. I wish them both well and am very pleased that the Department will be in such capable hands.

This year has been characteristic of recent years in the amount and diversity of intellectual activity. Our three

weekly "workshops" in micro-, macro- and quantitative economics have become permanent features. They attracted as speakers such visiting economists as Peter Hammond (Stanford), Costas Azariadis (Pennsylvania), Jerry Green (Harvard), Ephraim Sadka (Tel-Aviv), Ken Binmore (University of Pennsylvania at LSE), Suzanne Scotchmer (Harvard), David Card (Princeton), William Buiter (Yale), Paul Romer (Rochester), Ken Rogoff (Wisconsin), Stan Fischer (MIT), Michael Mouchart (CORE), John Geweke (Duke), Nick Kiefer (Cornell), Joseph Altonji (Columbia), Richard Baillie

(Birmingham), Chris Cavanagh (Harvard), Kenneth J. Singleton (Carnegie-Mellon) and Herman Bierens (Amsterdam).

In addition to this regular menu of visiting speakers, there are now two special lectures in the Department. The first is the well established Mackintosh Lecture which has attracted some of the most eminent economists in the world, including two Nobel laureates and several potential ones. The latter category would have to include this year's lecturer, Robert Lucas from the University of Chicago. Professor Lucas, whose work has revolutionized the



way we look at macroeconomic issues, discussed: "On the Mechanics of Economic Development" and took time to meet with faculty and students less formally. The other special lectureship was an innovation of this year. The Department has begun a special lectureship organized by the graduate student executive (it being alleged that their tastes in visitors may not coincide with that of the faculty!). This year, their choice of lecturer was Samuel Bowles of the University of Massachusetts, perhaps the most well-known radical economist. Professor Bowles' talk was entitled "Why Neo-classical economics is mistaken to ignore the issue of class".

Elsewhere, faculty were involved in the usual assortment of interesting activities and honours, many of which are documented later in this Newsletter. Doug Purvis and Jack Mintz organized a very successful Roundtable on Taxation and Investment Activity jointly with the Department of Finance in Ottawa. They have edited the proceedings and the published version will be available shortly. The John Deutsch Institute also held Policy Forums on the May 1985 Federal Budget and the February 1986 Federal Budget. A group of Queen's economists was part of a delegation of ten Canadian economists invited to attend a series of joint seminars at the Chinese Academy of Social Sciences in Beijing and elsewhere in China. This is documented later in the Newsletter. Richard Harris was awarded the Harry G. Johnson Memorial Prize for the best article in the Canadian Journal of Economics, an article entitled "Why Voluntary Export Restraints are Voluntary". He thus joins other Queen's economists to have been so honoured. Steve Kaliski has been elected President of the Canadian Economics Association.

On the personnel front there have been several new faces in the Depart-

ment. Two new faculty appointments joined us - Dan Bernhardt, a micro-theorist from Carnegie-Mellon, and Stan Zin, an econometrician from Toronto. Both have contributed immensely to the success of our workshop program. Mary MacKinnon, an economic historian who joined us last year from Oxford, was awarded both an SSHRCC Post-Doctoral Fellowship and a Queen's National Scholarship, the latter being a faculty position funded by the University fund-raising appeal of the past four years. We look forward to having Mary continue with us after an upcoming year at the Australian National University. One further new faculty member will join us in the 1986-87 academic year. He is Gregor Smith, a monetary economist who has just completed his D.Phil. at Oxford while on a Rhodes Scholarship. As well, the first appointee to the Bank of Montreal Chair, finance specialist, Alan Kraus from UBC, will take up a joint appointment in the School of Business and Economics. And, we have one new secretary, Jacqueline Mitchell, who has been kept busy helping Steve Kaliski with the organization of the annual meetings of the Canadian Economics Association, a task assigned to the incoming President of the Association.

We have again been fortunate with the number and quality of visiting professors who have been with us for all or part of the past year. They included Dave Cox, Allan Gregory and Linda Welling from Western Ontario, Mike Wickens and Steve Thomas from Southampton, Carmen Carrera from Madrid, Alok Ray from Calcutta, Tapan Biswas from Hull, David Yeung from York and André de Palma from Louvain. We also had short visits by Joop Hartog from Amsterdam, Manfred Rose from Heidelberg, Lauren Feinstone from Rochester, and David Webb from LSE. Steve Antler spent the year with us while on sabbatical from Memorial.

These visitors replaced a number of colleagues who were on leaves of absence in various parts of the globe. The list includes Neil Bruce at UCLA, Richard Lipsey at the C.D. Howe Institute, Jack Mintz at Carleton, Russell Davidson at Brussels, Steve Williamson at Western, and Frank Flatters in Indonesia. Those on sabbatical included Alan Green in ANU and York, England, Marvin McInnis at Santa Clara, Slobodan Djajic in Stockholm and Geneva, and Ross Milbourne at LSE.

As for me, I have enjoyed the past five years immensely, especially dealing with the fine group of people that comprise the QED. I am, however, looking forward to my sabbatical at the University of Louvain in Belgium to see if I can't catch up on all the economics that I missed while busy being Head.

Robin W. Boadway

The Boadway Bash

Imagine the banner headline ... "Economists Invade Simcoe Island in Drovers!" What could possibly account for this? Could the Free Trade debate be driving them closer to the border with the south? Has the opportunity cost of spending Saturday in Dunning Hall been outweighed by demand for leisure? No, it was just that 30 June 1986, brought Robin Boadway's term as Head of the Department to an end. He had made plans to spend the 1986-87 year on sabbatical at C.O.R.E. in Belgium. However, before he left, in true Departmental tradition, a "bash" was organized to see Robin and Bernie off in style.

The bash was to take place June 21st at the "CHOP's" (Casey-Harris-Olewiler-Purvis) cottage on Simcoe Island in Lake Ontario.

Most people opted not to swim or fly but chose, instead, from the two types of ferry service. Those risk averse people who preferred not to jeopardize their lives by heading out into the lake in 6 foot waves in a jon-



The menu was a carefully planned and coordinated potluck. "Gus, the Chef" was retained for the afternoon to roast the meat on his mobile barbeque.



boat, took the Wolfe Island ferry using their own cars or bikes. Those who could own up to being fearless, trusting, crazy, or any combination could opt for the "CHOP's-Deeley" private ferry service. The service was scheduled to run continuously until the supply of economists on the mainland was exhausted.

The promised activities were varied and plenty: Hikes to the Nine-mile lighthouse - nine miles away, of course!; (mis-)Guided tours of the McDougall estate; Pony-trekking (one pony, twenty kids!); Sailing and windsurfing (long on wind, short on sail). Last, but not least, Eating and Drinking.

The 21st dawned clear, bright, warm and - most important - CALM. The private ferry service had been reduced to two boats when the third boat blew up the night before (sorry Rick, I had to tell!) but spirits could not be daunted. Speeches were delivered, gifts were given and Robin and Bernie went on their way, duly bashed.



Three Queen's economists were part of a ten member exchange group to the People's Republic of China attending the Chinese Academy of Social Sciences in May.

Robin Boadway was joined by fellow colleagues, Richard Lipsey and John Hartwick on the three week visit sponsored by the Social Sciences and Humanities Research Council of Canada. Along with a Chinese translation of the paper he was scheduled to present on financing in the public sector, Robin took a list of Chinese applicants to Queen's in case he met any of them while he was there. Since only a small percentage of Chinese students go on to University, those who do are outstanding academic achievers. Robin said, "We bear that out at Queen's, where Chinese graduate students in economics have a strong background in mathematics, but little knowledge of western economic theory".

In recent years there have been major reforms in China's economic policies and it's clear that the Chinese are very anxious to learn of economic research done in industrial countries. There's an open door policy encouraging a number of exchanges with the United States, Canada and Australia. Robin said, "Ours is the first big group collectively, and the intention is that they come to Canada for an ongoing exchange of ideas".

The People's Republic of China had always been cut off from the rest of world markets but in the last five years, there has been a conscious effort toward efficiency of production using incentives in many enterprises. Through interaction with western economists, the Chinese hope to incorporate the best of western systems while controlling wages and prices within their own society bounds.

The Queen's economists flew to

Beijing in late April, and after three days of formal seminars, the Canadians spoke to smaller groups of economists from the Chinese Academy of Social Sciences. Although there are more than six thousand economists in China, compared with fifteen hundred in Canada, when viewed as a percentage of the population, China has very few economics experts. "The Chinese were very interested in our response to their reforms and we were encouraged by their open mindedness." Under a special set of rules, they are attempting more market incentives, encouraging foreign trade and increasing the amounts of their investments.

It wasn't all work, paper presentations and formal discussion, however. The group visited Xian, the ancient capital of China, where they toured a recently unearthed neolithic village. They travelled by train and bus through grain country, mining country and visited a large state enterprise in Canton, which has its own self contained commune and employs 20,000 people. The trip, of course, wouldn't have been complete without a visit to the Great Wall of China.

Since the 1970's, Canadian industries have been facing increasing competition from developing countries and from the more industrialized nations. The manufacturing sector is one area where Canada has significant potential to challenge foreign producers. However, in order to succeed, access to wider markets is essential. Proponents of free trade would argue that not only would a free trade arrangement with the United States provide Canada with this needed market, but it would also be a restraint against increased protectionist sentiments in that country.

Nevertheless, others are skeptical, perhaps because many forecasters have predicted high economic costs associated with such an agreement for central Canada, especially in the adjustment period. This concern stems partially from a preconception about the inability of Canada's manufacturing sector to compete in international markets. New studies however, show that Canada does have a comparative advantage in manufacturing and that the removal of trade barriers would be beneficial, especially, for central Canada.

Richard Harris and John Baldwin, both members of the Queen's Economics Department have done substantial work in this area and continue to provide optimistic results in favour of free trade. Harris embodies the assumptions of imperfect competition and increasing returns to scale in a general equilibrium framework. He uses this model to investigate various trade arrangements with the United States and their subsequent economic impact in Ontario. Baldwin examines the structure of the Canadian manufacturing sector to determine the relative importance of trade on the efficiency and competitiveness of the industry.

Adjustment Costs and Sectoral Free Trade

Previous studies by Richard Harris and David Cox have produced estimates of a permanent real income gain to Ontario of 8% to 10% of GNP from a Canada-US bilateral free trade agreement. This figure for long run income gain, however, does not take into account adjustment costs incurred during the assumed transition period.

Harris, in a paper prepared for the Ontario Government, provided an estimate of these adjustment costs in terms of creating unemployment. Looking specifically at the manufacturing and service industries in Ontario, he examined three forms of bilateral free trade, each differing in the timing of the reduction in trade barriers. His results indicate that in all three cases, the unemployment rate in Ontario would actually fall by a small but significant amount. There would also be a net creation of, between six and twelve thousand jobs, as well as a rise in gross provincial output. Finally, the manufacturing industries stand to gain the most in terms of employment and wage increases whereas the primary industries would experience a small loss in employment.

In another study, Harris provides a quantitative analysis of Canada-US sectoral free trade. He chose five industrial sectors including textiles, steel, agricultural machinery, urban transportation equipment and chemicals which are among those sectors which both federal governments are considering for a possible sectoral free trade agreement. His results indicate large benefits for the above sectors, even though they employ less than 5% of the total labour force. Real income gains are estimated at approximately 37% of the value added in the specific sec-

tors. In addition, the five sectors that were studied gain more under a sectoral free trade arrangement than under a general bilateral free trade arrangement.

Therefore, Harris' quantitative results again support a free trade initiative. More specifically, Ontario stands to gain both in the short and long term. Also, certain interest groups opposed to a bilateral free trade agreement may be convinced to support a sectoral free trade arrangement, given that they fare better under the latter.

Trade Barriers and Efficiency in the Canadian Manufacturing Sector

The Canadian manufacturing industry has been dominated by inefficient small scale firms producing an excessively diverse range of products. John Baldwin and Paul Gorecki, in a Macdonald Commission research paper, examined the efficiency of this sector. Using a combined industrial organization and international trade framework, they discuss how the industry has adapted to changes in imports, exports, and tariffs during the 1970's.

Persistent problems in the manufacturing sector have been short production runs and excessive product diversity, especially in those industries characterized by high concentration and high tariffs. The authors find that as the importance of international trade increased, product diversity declined. This occurred because while plants might increase their range of products to exploit plant scale economies in the first stages of market growth, in the later stages this process slows down and it becomes advantageous to specialize.

Baldwin and Gorecki also specify

the determinants of relative plant scale in order to examine why plants in the manufacturing sector may be smaller than is necessary to benefit from scale economies. Their results indicate that if Canada was to form a bilateral free trade area with the US, larger Canadian plants would be, on average, the size of larger American plants. This implies that the present trade restrictions are responsible for Canada's plant scale problem. However, even when plant scale differences and the importance of scale economies are taken into account, the authors claim that there still remains a relative efficiency gap between Canada and the US. The finding that the higher the import penetration, the greater Canadian relative efficiency once again confirms the importance of trade. It also suggests that the lowering of tariffs will result in an improvement in Canadian productivity.

To summarize, trade, via its positive impact on relative plant scale, can eliminate the product diversity problem, lengthen production runs, and improve overall efficiency. Trade liberalization in the 1970's has improved the competitiveness of the Canadian manufacturing industry. Free trade will ensure more rapid improvements in Canada's ability to compete abroad, particularly with the US.

This report is based on the following papers:

Baldwin, J. and P. Gorecki. "The Relationship between Trade and Tariff Patterns and the Efficiency of the Canadian Manufacturing Sector in the 1970's: A Summary", in *Canada United States Free Trade*, University of Toronto Press, 1985.

Cox, David and Richard Harris. "A Quantitative Assessment of the

First C.A. Curtis Prize Awarded

Economic Impact on Canada of Sectoral Free Trade with the United States", *Canadian Journal of Economics*, Aug. 1986.

Harris, Richard. "The Adjustment of the Ontario Economy to a Canada U.S. Free Trade Arrangement". Report prepared for the Selection Committee on Economic Affairs of the Ontario Legislature, Feb. 1986.



The C.A. Curtis Prize in Economics was established in memory of the late Professor C.A. Curtis by a group of his colleagues and former students. Professor Curtis taught economics at Queen's from 1927 to 1969 and was Dean of the School of Graduate Studies and Research from 1964 to 1968. The prize is to be awarded annually to the person judged to have written the best doctoral thesis in economics. Selection of the prize-winner will be made by a committee of faculty members from the Department of Economics nominated by the Head of the Department.

The winner of the first prize was Athanasios Stengos whose thesis was entitled "Non-linear Estimation in Models with Limited Dependent Variables and Sample Selectivity".

Dr. Curtis' widow, Mrs. Elsie Curtis presented the \$500 award to Athanasios at the Quantitative workshop on 2 October 1986.

Faculty Activities

Jack Mintz continued his leave from the Queen's Economics Department on Executive Interchange in the Department of Finance, as Special Advisor to the Corporate and Resource Tax Analysis Branch. His work with the government has not interfered with his academic work. Included among his many articles published are: "Commodity Tax Competition among Members of Federation" in the *Journal of Public Economics*, 1986; "Effective Tax Rates on Mining Industries" with Robin Boadway, Neil Bruce and Ken McKenzie, forthcoming in the *Canadian Journal of Economics*, 1986; "Taxation and Financial Policy of Firms: Theory and Empirical Application to Canada", with Gordon Fisher and Jan Bartholdy, forthcoming as an Economic Council of Canada publication and "Taxes on Capital Income in Canada: Analysis and Policy" with Robin Boadway and Neil Bruce, as a forthcoming Canadian Tax Foundation publication. He has also given seminars this year at the University of Toronto, MIT and National Bureau of Economic Research, Summer Institute, 1986. Jack also organized two conferences for the John Deutsch Institute, one on "Taxation and Business Activity" (with Doug Purvis) and "The Business Transfer Tax" (with Robin Boadway).

Robin Boadway spent a busy final year as Head of the Economics Department. Along with his many teaching and administrative responsibilities, Robin delivered a number of papers at conferences in Banff, Quebec City and Ottawa and published numerous articles: "The Role and Design of the Corporate Income Tax"; "The Effect of the Personal Income Tax on Savings and Investment", with Neil Bruce; "Theoretical Issues in Tax Reform", with Neil Bruce; "Personal Tax Measures in the May 1985 Budget",

"Pensions and Expenditure Taxation"; "Marginal Effective Tax Rates in the Canadian Mining Industry", with Jack Mintz and "Planning and Evaluation for Development Research". All of us at Queen's wish Robin and his family "une bonne année" in Belgium.

We welcome a new member to the Queen's Economics Department, **Stan Zin**. Stan attended a number of conferences this last year including the Canadian Econometric Study Group in London, in October and the Econometric Society's World Congress in Boston in August. Furthermore, he had an article and a comment accepted for publication, "A Diagnostic Test for Normality within the Power Exponential Family" with Dale J. Poirer and Mario Tello and "Comment on 'Modelling Conditional Variances Discussion". He continues research work on Non-linear Time-Series Models and Life-Cycle Consumption Models.

Klaus Stegemann presented a paper on "Anti-Dumping Policy and the Consumer" at the 1985 meetings of the European Association for Research in Industrial Economics in Cambridge, England. This paper has been published in the *Journal of World Trade Law*, September/October 1985. A related paper has been included in an OECD report on *International Trade and the Consumer* (Paris 1986). Klaus is continuing his research on the provisions for price undertakings in Canada's Special Import Measures Act and has presented seminars on this work at the World Bank and the Institut des Hautes Études Internationales in Geneva. As chairman of the Senate Committee on Academic Procedures, he is discovering that seemingly simple matters such as re-scheduling of the fall term or spring convocations are in fact most touchy political issues.

This last year saw **Martin Prachowny's** text *Money in the Macroeconomy* published by Cambridge University Press in New York. Martin's numerous responsibilities this year included Coordinator of Economics 220 and Graduate Placement Officer. As well he found the time to present or discuss papers in Montreal at the CEA meetings and at McGill University. Lastly, he has written a number of papers including: "Managed Exchange Rates"; "Conflict in the Labour Market: Seniority Rules and Unemployment"; "Macroeconomic Policy in a Conflict Environment"; and "Who Are the Volunteers in the Battle Against Budget Deficits?"

Steve Kaliski continued his work with Charlie Beach on Labour Market behaviour in Canada. A number of papers resulting from this work have been or are about to be published. Also published was a survey paper prepared for the Macdonald Commission; "Trends, Changes and Imbalances: A Survey of the Canadian Labour Market". As President Elect of the Canadian Economics Association, Steve organized the May 1986 Meetings of that Association in Winnipeg. He is currently serving as President.

Frank Lewis, an economic historian, continued his work on Canadian railway development. His paper with Mary MacKinnon, "Government Loan Guarantees and the Failure of the Canadian Northern Railway," was presented to the 14th Conference on Quantitative Methods in Canadian Economic History and is forthcoming in the *Journal of Economic History*. Next year, while on sabbatical at the Australian National University, he will analyze Australian railways in light of what he has learned about the Canadian experience. During the past year, Frank edited a report on

Reform of the [Canadian] Bankruptcy Act, one of the Policy Forum Series published by the John Deutsch Memorial for the Study of Economic Policy. Also, in an attempt to induce a co-author to give up cigarettes, he wrote with Richard Arnott and Nancy Olewiler, "Cigarette Smoking and Quitting: A Life-Cycle Approach," which was presented at the Canadian Economics Association (CEA) meetings in Winnipeg.

Steve Williamson began work under a two year SSHRCC post-doctoral fellowship in July 1985, and has been actively engaged in research and on the conference and seminar circuits. Steve presented papers at the Canadian Economics Association meetings in Montreal, June 1985, the Allied Social Sciences Association meetings in New York, December 1985, and the Econometric Society summer meetings at Duke University, June 1986. He also acted as a discussant at a conference at the NBER in Boston, May 1986, and gave seminars at the Bank of Canada (September 1985), McGill University (April 1986), and the Federal Reserve Bank of Minneapolis (July 1986). Steve recently had 3 papers accepted for publication; "Costly Monitoring Financial Intermediation, and Equilibrium Credit Rationing", in the *Journal of Monetary Economics*; "Increasing Returns to Scale in Financial Intermediation and the Non-Neutrality of Government Policy", in the *Review of Economic Studies*; and "Costly Monitoring Loan Contracts, and Equilibrium Credit Rationing", in the *Quarterly Journal of Economics*. Steve's current research includes work on banking, government financial regulation, and the role of money and intermediation in the business cycle.

One of our busiest faculty members, **Richard Arnott** continued his research in the areas of moral hazard, housing and transportation. A number of his papers were accepted for publication including: "Usage-Dependent Peak-Load Pricing", with André de Palma; "Spatial Aspects of Housing Quality, Density and Maintenance" with Russell Davidson and David Pines; and "The Effects of an Equiproportional Transport Improvement In a Closed Monocentric City", with David Pines and Efraim Sadka. As well, Richard visited Tel-Aviv University for a month, and did some consulting work in the Sudan.

Jon Harkness has had a successful year in publishing. Among the papers were: "OPEC, Rationality, and the Macroeconomy" in the *Journal of Macroeconomics*, VII, 4; "Optimal Exchange Intervention for a Small Open Economy", in the *Journal of International Money and Finance*, March 1985, IV; and "Macro Stabilization and the Optimal Exchange Regime" in J. Bhandari (ed.) *Exchange Rate Management Under Uncertainty*. Jon's main research interest at the present time is a paper on "Exchange Risk and the Capital Asset Pricing Model". His other interests include work on "Labour Supply Disincentive for the Disabled in Canada" and "Public Housing: The Cost Effectiveness of New Construction vs. Renovation."

Linda Welling returned to the Department this past year, journeying back to the University of Western Ontario to defend her thesis - "Optimal Product Warranties Under Asymmetric Information" - in April 1986. Her current research interest includes work on product recalls and the effect of liability legislation on product innovation.

Tom McCurdy spent the first part of 1985 working on a dynamic multisectoral general equilibrium model to assess potential scenarios for the impact of technical change on income, employment and occupational structure. In the fall, his work concentrated on research concerning time-varying volatility and risk premia in financial markets. Tom attended and delivered papers at a number of conferences. Included among these was "The Unbiasedness Hypothesis in the Forward Foreign Exchange Market: A Cross-Country Specification Analysis" delivered at the International Symposium on Forecasting in Montreal and "Employment and Income Effects of Microelectronic-based Technical Change: A Multisectoral Study for Canada" delivered at the Canadian Economics Association also in Montreal. He also hopes to publish several articles shortly, including "Simultaneous Price-Quantity Adjustments in the Presence of Spillovers across Markets," with D. Yannelis and "An Efficiency Frontier Model for Analysing Macroeconomic Implications of Structural Shocks".

This year **James MacKinnon** took time off from his usual busy schedule to get married. He also became Chairman of Graduate Studies for the next two years. These events are thought to be unrelated. James presented papers at McMaster, the University of Toronto, New York University, Yale and Cornell, and also at various scholarly conferences. He published several papers, including "Testing Linear and Loglinear Regressions Against Box-Cox Alternatives" (with Russell Davidson) in the *Canadian Journal of Economics*, "A Simplified Version of the Differencing Test" (with Russell Davidson and Leslie Godfrey) in the *International*

Economic Review, "Some Heteroskedasticity Consistent Covariance Matrix Estimators with Improved Finite Sample Properties" (with Hal White) in the *Journal of Econometrics* and "Heteroskedasticity-Robust Tests in Regression Directions" (with Russell Davidson) in *Annales de l'INSEE*. He also wrote several papers which have been submitted for publication. Most recently, James has been working on a project entitled "Non-regression models and tests in non-regression directions", and also doing work on specification-consistent covariance matrix estimators.

Russell Davidson has spent the last two years in Belgium, 1984-85 at CORE on Sabbatical, and 1985-86 at the Université Libre de Bruxelles as a Visiting Professor. He found that teaching in French was a very stimulating aspect of life in Europe. Despite the distance, Russell has continued to work on several projects with James MacKinnon, most notably on a paper entitled "Implicit Alternatives and the Local Power of Test Statistics". This collaboration has recently been aided by improvements in the computer networks to which Queen's belongs. Russell has also been working on a number of other projects, principally in theory rather than econometrics. On two occasions, he survived the slightly intimidating experience of giving the Séminaire Malinvaud in Paris. Over the two years, Russell also presented papers at a number of international conferences and at several Dutch and English universities.

Bentley MacLeod saw the publication of his paper "On the Non-existence of Equilibria in Differentiated Product Models", which appeared in the *Journal of Regional Science and Urban Economics*. His article "On Adjustment Costs and the Stability of Equilibria" appeared in *The Review of Economic Studies* as well as "A Theory of Conscious Parallelism" in the *European Economic Review*. At present, he is working on several papers; a joint study of dynamic labour contracts with James Malcomson, another joint effort with Yoshi Kanemoto on the theory of production teams and "Equilibrium in Markets with Discriminating Oligopolists" with Shlomo Weber and Victor Ginsberg; "Empirical Tests of Pricing in Oligopolistic Markets" with Victor Ginsberg; and "The Structure of Equilibria in Games played by Finite Automation" with Hans Meijer. Forthcoming papers: "Entry, Sunk Costs and Market Structure" in the *Canadian Journal of Economics*, "Behaviour and the Organization of the Firm" in the *Journal of Comparative Economics* and "Collusion, Spatial Competition and Free Entry" in the *Economic Journal*.

Rick Harris has spent a great deal of time during the past year working on "A Dynamic Multi-Sectoral Adjustment Model of the Canadian Economy" which he completed in November 1985 and for which he is currently preparing a monograph. He has had numerous articles published including the following; "Summary of a Project on the General Equilibrium Evaluation of Canadian Trade Policy" in J. Whalley and R. Hill (eds.), *Canada United States Free Trade*, vol. 11 of Royal Commission on the Economic Union and Development Prospects for Canada; "Jobs and Free Trade" in D. Conklin and T. Courchene (eds.) *Canadian Trade at a*

Crossroads: Option In New International Agreements, Ontario Economic Council, Special Research Report; and "Why Voluntary Export Restraints are 'Voluntary'", *Canadian Journal of Economics*, XLVIII, No. 4. Rick also gave a number of seminars in 1985 in several places including the University of Toronto, Western Ontario, Guelph and Melbourne as well as at the Ontario Economic Council, Canadian Trade at the Crossroads Conference, Canada-Mexico-US. Conference on International Trade and Industrial Organization (sponsored by the Ford/Donner Foundation), Mexico and the Canadian Economics Association/Canadian Political Science Association Joint Session, Learned Society Meetings, Montreal. He was also the winner of the 1985 Canadian Economics Association Harry Johnson Prize. Currently he is involved with the Department of Finance in building a large scale model of Canada-US trade for use in the trade negotiations.

Alan Green has had another active year on the publication scene. His paper "A Macro Interpretation of Economic Recovery from the Great Depression: Australia vs. Canada", co-authored with Gordon Sparks, was published in *Working Papers in Economic History*, ANU, Canberra Paper No. 40. Other papers published this year include "Policy Options in a Small Open Economy: Canada During the Great Depression", *Working Papers in Economic History*, ANU, Canberra Paper No. 60; "Universality in the 80's", edited with Nancy Olewiler, John Deutsch Institute Series (Queen's, 1985); and "Productivity and Labour Costs in the Ontario Metal Mining Industry", with Ann Green, Mineral Policy Background Paper, No. 19 (Toronto, 1985). Alan has also been very busy on the conference scene. He delivered several papers to the Canadian

Historical Association in Montreal, the Australian National University and various other Universities. These papers included two which were co-authored with John Baldwin; "Efficiency in an Open Economy: Manufacturing Growth, Canada vs. the US, 1919-1939" delivered at the University of Adelaide in October 1985 and "Growth, Mergers and Efficiency: The Productivity of the Canadian Manufacturing Sector Relative to the United States, 1890-1939", delivered to the Canadian Historical Association in June 1985. Alan was also honoured by being appointed Senior Research Fellow at the Australian National University, from 15 August to 30 November 1985 and elected to the Board of Directors of the Social Science Federation of Canada, (3 year term), representing the CEA.

Gordon Sparks is currently hard at work on "An Empirical Rational Expectations Model of the Canadian Exchange Rate" which he hopes to have finished this summer. Other works in progress include a new macroeconomics textbook and two papers: "Australian vs. Canadian Recovery from the Great Depression", with Alan Green, and "The Effects of CHOSP on Housing Starts". "A Macro Interpretation of Economic Recovery from the Great Depression: Australia vs. Canada" will be published shortly. During the last year, Gordon published "Theory and Practice of Monetary Policy in Canada, 1945-83", Research Study for the Royal Commission on Economic Union and Development Prospects for Canada, in *Fiscal and*

Monetary Policy (vol. 21) and was the editor of "Report of the Policy Forum on the International Debt Problem", John Deutsch Institute. He also found the time to publish yet another textbook, "Macroeconomics", 2nd edition, with R. Dornbusch and S. Fischer. Gordon will be Acting Head of the Department until June 1987.

Dan Usher plods away at topics in public finance. His latest papers are "The Growth of the Public Sector in Canada" vol. 27 of studies for the Macdonald Commission and "Police Punishment and Public Goods", *Public Finance*, 1986. Papers accepted for publication during 1987 include: "Theft as a Paradigm for Departures from Efficiency", *Oxford Economic Papers*, "Tax Evasion and the Marginal Cost of Public Funds", *Economic Inquiry*, and (with Merwan Engineer) "The Distribution of Income in a Despotism Society", *Public Choice*.

Dan Bernhardt joined the department in 1985. Dan did his graduate work at Carnegie-Mellon University. Two papers from his Ph.D. thesis, "Three Essays in Micro Economic Theory" were published in 1985: "Dumping, Adjustment Costs and Uncertainty", *Journal of Economics, Dynamics and Control*; and "Candidate Reputations and the Incumbency Effect", *Journal of Public Economics*. The third essay, "Money and Loans", was presented at the Econometric Society Summer Meetings (Summer 1986) and "Multiperiod Wage Contracts and Productivity Profiles", with G.C. Timmis, was presented at the U.W.P./Michigan Economic Theory Meetings (Fall 1985). Dan is currently working on problems in labour theory and the theory of industry structure.

Charlie Beach's major research project with Steve Kaliski, "Study of Labour Market Behaviour in Canada" which began in 1981 has continued. Four new papers emerging from this project have been submitted for publication in major journals. He completed a draft begun in late 1984 of a major research monograph with Robin Boadway and Neil Bruce on "Taxation and Savings in Canada" for the Economic Council of Canada. He is also finishing a survey paper on income distribution for the *Encyclopaedia of Economics*. Charlie presented a summary paper from this at the Canadian Economic Association meetings in Montreal and has given several talks on his work with Steve as well as with Robin and Neil. In addition, he has had a number of research articles accepted for publication and continues his involvement in organizing the Canadian Econometric Study Group meetings. He is going to be spending the coming year on sabbatical leave at the Industrial Relations Section in Princeton trying to figure out how his "PC" works.

Frank Flatters returned to the Department having been on leave in Indonesia since 1983. He was coordinating a project for the Harvard Institute for International Development to assist the Indonesian government on matters related to the reform of international trade policy. During these three years, Frank was able to continue his research on the effects of trade and industrial policies. While much of the work was specifically directed at the Indonesian development policies.

Mary MacKinnon was awarded the 1985 Alexander Gerschenkron Prize (for the best thesis written on the economic history of a country other than the United States) by the Economic History Association. A paper from the thesis, "Poverty, Unemployment, and Pauperism" is forthcoming in *Explorations in Economic History*. She also presented a paper on English poor relief at the University of California conference on poverty and dependency in the 19th century. A SSHRCC post-doctoral fellowship and research grant will permit her to continue studying unemployment in Canada, 1900-39. Mary will be spending 1986-87 at the Australian National University.

Scott Gordon has been working on a book called "An Introduction to the History and Philosophy of Social Science". Last winter he completed chapters on the sociologists: Spencer, Durkheim, and Weber, and the great debate over methodology in economics between the German Historical School and the Austrian marginalists. He is now writing a chapter on the relation between biology and social theory before and (especially) after Darwin.

John Baldwin passed a busy year completing a major project in the area of industrial structure, productivity and trade adjustment which was done jointly for the Economic Council and the Royal Commission on the Economic Union. This work, done with Paul Gorecki who is a former Queen's student, studied the entry and exit process, the effect of trade liberalization on Canada-US

plant scale and Canada-US productivity differences. Among the articles that have been published so far are "The Determinants of Small Plant Market Share in Canadian Manufacturing Industries in the 1970s", *Review of Economics and Statistics*; "The Relationship Between Plant Scale and Product Diversity in Canadian Manufacturing Industries", *Journal of Industrial Economics*; "Imports and Measures of Concentration: The Canadian Case, 1979", *Applied Economics*; "The Relationship Between Trade and Tariff Patterns and the Efficiency of the Canadian Manufacturing Sector in the 1970s: A Summary", *Canada-United States Free Trade*, Vol. 11 of the research reports of the Royal Commission; and "Canada-US Productivity Differences in the Manufacturing Sector: 1970-79", *Canadian Industry in Transition*, Vol. 2 of the research prepared for the Royal Commission. Much of this work was brought together and published as a separate volume for the Macdonald Commission - *The Role of Scale in Canada-US Productivity Differences in the Canadian Manufacturing Sector in the 1970s*. Parts of this work were presented at the Montreal meetings of the Canadian Economics Association at the Fountainbleu and Cambridge meetings of the European Association for Research in Industrial Economics over the past two years. During the year, John has also completed a monograph that studies the different types of regulatory instruments that evolved in Canada to control the utility sector. An earlier, reduced version was published as "Regulation versus Public Enterprise: Instrument Choice in the Case of Natural Monopoly" in *Government Enterprise: Roles and Rational*, Economic Council.

Miscellaneous work includes: a paper on the prospects and problems

of the privatization process in the Canadian airline industry which was presented at a Conference sponsored by the Institute for Research on Public Policy and published as "The Privatization of Air Canada" in W.T. Stanbury and T. Kierans, eds. *Papers on Privatization*, IRPP; a paper on the determinants of the Canadian tariff structure, Economic Council Discussion Paper #280; and a paper on mergers and merger policy, Economic Council Discussion Paper #297.

Finally, John has continued to work on a project that examines the evaluation of the Canadian Manufacturing sector. The work until now has consisted of matching the Canadian and US census of manufacturing for 1890, 1900, 1910, 1919, and 1929 to examine the progress of the Canadian manufacturing sector prior to World War II. Most of the data has now been collected and the first results were presented in a paper given in Bellagio, Italy this spring at a conference on international comparisons of productivity.

Dave Backus has continued collaboration with John Driffill and a number of joint articles have been published, including: "Rational Expectations and Policy Credibility", *REStud.*, April 1985; and "Inflation and Reputation", *AER*, June 1985. He has given these papers all over Canada and the UK, and will continue his travels next year with sabbatical leave at Stanford and the University of Minnesota. Current research includes work on asset prices with Allan Gregory and Stan Zin and something "really big" with Dan Bernhardt.

Neil Bruce has spent the last two years on leave at UCLA. Forthcoming publications include: "Capital Income Taxation and the Allocation of Capital in Canada" a monograph with Robin Boadway and Jack Mintz and "Savings and Taxation in Canada," a technical study for the Economic Council of Canada with Robin Boadway and Charlie Beach. Also, "A Calculation of Marginal Effective Tax Rates for Canada", with Robin Boadway and Jack Mintz will appear in the *Canadian Journal of Economics*. Recent publications also include "Capital Tax Reform in a Capital-Importing Economy", with Boadway *et al.* and "The Consequences of Economic Deficits", with Doug Purvis in the Research volumes of the *Royal Commission on the Economic Union*.

Recent manuscripts submitted for publication include: "Taxation and Savings: Some Life Cycle Estimates for Canada", with Boadway *et al.*, manuscript. "Capital Tax Reform in a Capital-Importing Economy", manuscript 1986. "The Good Samaritan Meets the Rotten Kid", manuscript, 1986 with Michael Waldman.

Neil is presently working on a survey of the literature on consumer's surplus (invited by *Economic Inquiry*) and a paper on the public sector discount rate.

Marvin McInnis spent 1985-86 on sabbatical at the Agricultural History Centre in Davis, California. Marvin's paper "Ontario Agriculture, 1851-1901: A Cartographic Overview" appeared in *Canadian Papers in Rural History*, vol. 5. He presented a paper entitled "Culture and

Demographic Transition: Some Observations from the Canadian Case" at the 20th General Conference, International Union for the Scientific Study of Population which was held in Florence, Italy. Marvin continues his research on demographic changes in Canada and publications are forthcoming.

Mike Abbott has been a member of the Principal's Advisory Committee on Equal Pay Issues since 1984. This committee will be making recommendations in its final report early next year following the results of a job evaluation project conducted by an outside consulting firm. He will continue as the Chairman of the Computing Committee for the Department as well as serving on several university computing committees.

Mike was the recipient of an award from the Advisory Research Committee (ARC) together with Charlie Beach for "Sample Selectivity in the Comparison of Lorenz Curves for Earnings". He has a number of research papers currently underway. They include the following: "Male and Female Earnings in Canadian Manufacturing, 1931" with Ruth Beck; "Alternative Estimates of Union-Nonunion and Public-Private Wage Differentials in Ontario, 1981" with Thanasis Stengos; and "Recent Outcome Evaluations of Employment and Training Programs: A Review of Methodology" with Orley Askenfelter. He has also been active in the supervision of 4th year Honours B.A. Theses.

Lorne Carmichael spent the fall term at Queen's and from 1 January to 30 June he has been on leave as a

Visiting Professor at the University of Washington in Seattle. During 1985 Lorne published two articles: "Specific Human Capital, Layoffs and Unemployment: Comment", in the *International Economic Review* and "Is the Unemployment in Efficiency Wage Models Involuntary?" in the *American Economic Review*.

On 1 September 1986, Lorne will be replacing Glenn MacDonald as Assistant Editor of the *Canadian Journal of Economics*. He has one article forthcoming in 1986; "Reputations for Safety; Market Performance and Policy Remedies" in the *Journal of Labour Economics*.

Lorne is the recipient of an SSHRCC grant for 1986-87 for research on the topic "Interest Rates and Unemployment". He is also embarking on a three year project with Richard Arnot and Bentley MacLeod on the "Economics of Institutions" which is also supported by SSHRCC.

Gordon Fisher completed his second period as Chairman of Graduate Studies in 1986. He delivered a paper on "Corporate Taxation and Financial Structure" to the Fifth World Congress of the Econometric Society in August (jointly authored with Jan Bartholdy and Jack Mintz) and a paper on "Point-optimal Cox Tests" to the Second Canadian Econometric Study Group in September. The study "Taxation and the Financial Policy of Firms" (with Jan Bartholdy and Jack Mintz) is now completed for the Economic Council and will soon be published. Another paper, with Richard Smith of Manchester, was completed during the year: this deals with applications of Hausman Tests. Cooperative research with Noxy Dastoor, now at the University of Alberta, continues on invariance and partial isometrics in econometrics. During the year he was again a Visiting Scholar at Concordia University.

Mac Urquhart was awarded the honorary degree Doctor of Civil Laws by Bishop's University during June 1985. He continues his work on a major project of writing up detailed background material to estimates of National Income, 1870-1926 and recently received a Killam award in support of this work. He continues to do some teaching.

Doug Purvis has accepted an appointment as Head of the Department from July 1987 for a four year term. Doug has been commuting between Queen's and Ottawa for the past year while holding an appointment as Clifford Clark Visiting Economist in the Department of Finance. This appointment extends until December 1986. Doug has continued as Director of the John Deutsch Institute for the Study of Economic Policy (JDI) despite his hectic schedule this year. Two Policy Forums were organized concerned with the May 1985 and February 1986 Federal Budgets and the proceedings have now been published. In addition, the fourth Roundtable co-sponsored with the Department of Finance was held in November 1985 in Ottawa. The report of this Roundtable will be published shortly. Doug is presently involved in revision of the American version of the undergraduate textbook "Economics", co-authored with Richard Lipsey and Peter Steiner. This will be the eighth edition of the popular text.

Doug's numerous activities include taking an active part in the organization of the new School for Public

Policy at Queen's as a member of the Council for Public Policy, representing the JDI as well as being a member of the Board of Advisors of (The International Association for Students in Economics and Commerce) AIESEC. AIESEC was responsible this year for co-ordinating the inaugural Walwyn lectureship and inviting Hal Jackman to give the inaugural lecture. Doug also maintained a steady flow of publications during the year. They include; "A Positive Theory of Fiscal Policy in Open Economies", with Dave Backus and Michael Devereux, "Public Sector Deficits, International Capital Mobility, and the Domestic Economy: The Medium Term is the Message", "Fiscal Policy in Canada, 1963-83", with Connie Smith, "Consequences of Government Budget Deficits", with Neil Bruce, "Summary Remarks: Symposium on Australia and European Macroeconomics Experience", *Declining Productivity and Growth, Report of the Policy Forum on the May 1985 Federal Budget*, "Comment on Bossons" in *Pensions Today and Tomorrow: Background Studies*, *Economics*, with Richard Lipsey and Peter Steiner. Doug will be taking a well-earned break for the first six months of 1987 while he is on Sabbatical.

Ross Milbourne spent the past year on sabbatical at the London School of Economics (LSE) and the University of New South Wales, Australia. He presented papers at the Royal Economic Society Conference, Cambridge ("Re-examining the Buffer Stock Model") and at the Econometric Society meetings, Melbourne ("Interest, Bank Reserve Requirements and Welfare"). He also delivered seminars at LSE, University College, London and the universities of Bristol, Essex, Newcastle, Edinburgh, the University of New South

Wales and the Reserve Bank of Australia. His paper "Distinguishing Between Australian Demand for Money Models" appeared in *Australian Economic Papers* last June. Several other papers are to appear this year including "Financial Innovation and the Demand for Liquid Assets" (*Journal of Money, Credit and Banking*); "Credit Cards and Aggregate Money Demand" with Hafiz Akhand (*Journal of Macroeconomics*); "Some Statistical Evidence on the Effects of Financial Innovation" with Alec Moore (*Review of Economics and Statistics*); and shorter papers and comments including "A New View of Federal Debt and Budget Deficits" with Dan Richards (*American Economic Review*).

John Hartwick celebrated the publishing of the text *Economics of Natural Resource Use*, co-authored with Nancy Olewiler. Part of the collaborative work with David Yeung appeared in *Economics Letters*, "Preference for Output Price Uncertainty by Non-renewable Resource Extracting Firms". A paper with Yoshi Kanemoto, "The Formation of Convoys, Tennis Ladders, Colleges and Other Similar Groups" was delivered at the World Congress of the Econometric Society in Cambridge, in August. His play dealing with Isaac Newton's tenure crisis was performed by Kingston Unitarians and is being published in Boston by the Unitarian Association. In September he departed for his sabbatical at Oxford University.

Tom McCurdy presented a paper entitled "The unbiasedness hypothesis in the forward foreign exchange market: a specification analysis with application to France, Italy, Japan, the United Kingdom and West Germany", last summer at the International Symposium on Forecasting. This paper, written jointly with Allan Gregory, has recently been published in the *European Economic Review*. He also presented a paper on stability theory at the World Congress of the Econometrics Society held at MIT; as well as one reporting results from his project assessing potential scenarios for the impact of technical change on income, employment and occupational structure at the CEA meetings in Montreal. Tom is currently working on extensions of the latter project. His activities in this area have also included presentations at the Economic Council of Canada; and participation in a televideo conference organized by the Studies in Communication and Information Technology group, who have also published one of Tom's papers on this topic. Another of Tom's research interests is time-varying volatility and risk premia in financial markets. He and Ieuan Morgan are presently working together in this area and have co-authored two papers, "Testing the martingale hypothesis in the Deutschmark/US dollar futures and spot markets", and "Tests of the martingale hypothesis for foreign currency futures with time-varying volatility".

Nancy Olewiler completed a study for the Economic Council of Canada on the Potash Corporation of Saskatchewan. The study was published as a discussion paper for the Council in 1986. Nancy's book, co-authored with John Hartwick, "The Economics of Natural Resource Use" was published during 1986. She also

published a "Comment" on a paper deriving a long-run supply curve for uranium in a conference volume on natural resource economics. Along with Alan Green, she edited the proceedings of a John Deutsch Institute Policy Forum on "Universality and Social Policy in the 1980s".

Nancy currently has a number of projects underway. She is working on an empirical study testing contingent valuation approaches to estimating the shadow price of recreational goods; the "willingness to pay for a reduction in acid rain emissions"; and "Cigarette Smoking and Quitting: A Life Cycle Approach" with Frank Lewis and Richard Arnott. The cigarette paper was given at the CEA meetings in Winnipeg this year. A study for the C.D. Howe Institute with David Anderson (Centre for Resource Studies) and Mike Percy (Alberta) on Canada's Declining (?) Natural Resource Industries is also underway.

As the Director of Undergraduate Studies for 1986-87, Nancy has been investigating ways of making the undergraduate program more attractive. One option she is considering is a new degree program which would combine Economics and Aerobics, producing students able to leap Ottawa in a single bound, or at least be able to climb the stairs in Dunning Hall. During her spare time, she gives aerial tours of Simcoe, Wolfe, and Howe Islands and edits *Harlequin Romances* about the inhabitants of Simcoe Island, written by Kathy Waugh, Trisha Purvis, and Judy Reid.

QED List of Lists

Recent Ph.D. Recipients

1985 – November

Anderson, Simon

Three essays on address models of value theory.

Supervisor: R.J. Arnott

Drewes, Torben

Interregional wage transmission and unemployment disparities in Canada.

Supervisor: C.M. Beach

Landon, Stuart Karl

Three essays on adjustment.

Supervisors: D.D. Purvis and

T.H. McCurdy

Lippens, Robert Edward

Multimaturity test in international financial markets of efficient market hypotheses: A comparative study of Japan and Canada.

Supervisor: D.K. Backus

1986 – May

Atkins, Frank Joseph

A frequency domain analysis of the long-run relation between nominal interest rates and inflation in Canada and the United States.

Supervisors: D.K. Backus and

R.D. Milbourne

Devereux, Michael Bernard

Inflation, exchange rates and economic policy.

Supervisors: D.D. Purvis and

N. Bruce

Frank, Murray Zed

Essays on industrial behaviour under uncertainty.

Supervisors: R.J. Arnott and

J.M. Mintz

Karikari, John Agyei

Tariff protection in oligopoly: A theoretical and empirical analysis.

Supervisors: C.M. Beach and

J.R. Baldwin

Kato, Takao

An economic analysis of Japanese and North American internal labour markets.

Supervisors: R.J. Arnott and

S.F. Kaliski

Nicol, Christopher John

Estimating higher-order flexible functional form demand systems with Canadian cross-section micro-data.

Supervisors: C.M. Beach and

J.G. MacKinnon

Townley, Peter Gordon Charles

Provision of retirement incomes under political and informational restraints.

Supervisors: R.W. Boadway and

J.M. Mintz

Wylie, Peter James

Electrification and technological adaptation in Canadian manufacturing, 1900-1929.

Supervisors: F.D. Lewis and

A.G. Green

Special Awards, Honours and Appointments

Steve Kaliski	President, Canadian Economic Association
Robin Boadway	Fellow of the Royal Society of Canada
Alan Green	Senior Research Fellow at the Australian National University
Rick Harris	1985 Harry Johnson Prize for best article in the Canadian Journal of Economics
Mary Mackinnon	1985 Alexander Gerschenkron Prize, Economic History Association
Gordon Sparks	Acting Head, Department of Economics
M.C. Urquhart	Senior Killam Award, Dalhousie University Doctor of Civil Laws, Honorary degree - Bishop's University, June, 1985

EDITOR Shelagh Deeley

WRITERS Julie Groulx, Kathy Waugh,
Shelagh Deeley

SECRETARIAL Jane Baldwin, Angie Street

GRAPHIC DESIGN Queen's Graphic Design Unit