

EMANUEL CARVALHO

EDUCATION

- 1982 Ph.D. Urban and Regional Planning, University of Waterloo
Thesis: “Economic Planning for Balanced Development in a Diversified Resource Region: The Alberta Peace.”
- 1976 M.A. Economics, University of Waterloo
- 1975 B.A. Honours Economics, University of Waterloo

EMPLOYMENT

- 2000-present Associate Dean, Co-op, Administration and Planning, Faculty of Arts, University of Waterloo
- 1990-present Associate Professor, Department of Economics, University of Waterloo
- 1982-1990 Assistant Professor, Department of Economics, University of Waterloo
- 1976-1982 Lecturer, Department of Economics, University of Waterloo

Research activities include: (refer to Section A for more detail)

- researching in the area of local and regional economic development and growth;
- mobilizing knowledge;
- editing and reviewing monographs;
- presenting papers at professional conferences;
- refereeing journal articles.

Teaching responsibilities include: (refer to Section B for more detail)

- developing, revising, and teaching introductory, intermediate, senior, and graduate courses;
- supervising graduate and senior honours papers;
- serving on graduate examination committees.

Administrative responsibilities include: (refer to Section C for more detail)

- undertaking administrative responsibilities;
- serving on department, faculty, and university committees;
- planning and organizing conferences and programs on local and regional economic development.

SECTION A

Research Activities

Published Papers

“Regional Employment Changes in a Booming Resource Economy: A Modified Shift-Share Analogue Regression of Changes in Employment Patterns Within the Economic Region of Alberta,” (with J. Brox and J. MacKay), *Canadian Journal of Regional Science*, Volume 33(2), 2010.

“The Impact of Goods and Services Tax on the Pattern of Canadian Consumer Spending and Saving,” (with Z. Lian), *The Journal of Economic Asymetries*, 2010.

“An Application of the Regression Analogue of the Demographically Enhanced Shift-Share Model,” (with J. Brox), *The Review of Regional Studies*, 2006.

“A Demographically Augmented Shift-Share Employment Analysis,” (with J. Brox), *The Journal of Regional Analysis and Policy*, 2005.

“Sectoral Labour Market Adjustment in the Provinces of Ontario and Quebec,” (with J. Brox), *Canadian Journal of Regional Science*, 2003.

“A Demographically Augmented Shift-Share Analysis of Atlantic Canada Employment Trends,” (with J. Brox), *Atlantic Canada Economic Papers*, 2000.

“The Demand for Domestic and Imported Alcoholic Beverages in Ontario, Canada: A Dynamic Simultaneous Equation Approach,” (with A. Andrikopoulos and J. Brox), *Applied Economics*, 1997.

“Shift-Share Analysis and the Potential for Predicting Regional Growth Patterns: Some Evidence for the Region of Quebec, Canada,” (with A. Andrikopoulos and J. Brox), *Growth and Change: A Journal of Urban and Regional Policy*, 1990.

“Planning for Resource Frontier Economic Development,” (with L. Gertler), *Geoforum*, 1990.

“Inter-Fuel Substitution in the Canadian Manufacturing Sector: Alternative Modelling Approaches,” (with A. Andrikopoulos and J. Brox), *International Journal of Modelling and Simulation*, 1988.

“Input Substitutability in Canadian Manufacturing: An Application of the CES-Translog Production Function,” (with J. Brox and D. Lusetti), *Atlantic Economic Journal*, 1988.

“A Further Test of the Competitive Effect in Shift-Share Analysis,” (with A. Andrikopoulos and J. Brox), *The Review of Regional Studies*, 17(3), 1987.

“Patterns of Growth Differentials in Manufacturing Employment: Northern Greece,” (with A. Andrikopoulos), *Spoudai: Quarterly Economic Journal*, 36, 1986.

“Inter-Fuel Substitution in the Canadian Manufacturing Sector: Alternative Modelling Approaches,” (with A. Andrikopoulos and J. Brox), in *IASTED Applied Simulation and Modelling*. Edited by D.O. Koval, Calgary: Acta Press, 1986.

“Information Base and Regional Analysis for the Peace River Region of Alberta,” *Environments*, 1985.

“Substitution in Demand for Protein Commodities,” (with A. Andrikopoulos and J. Brox), *Canadian Journal of Agricultural Economics*, 1984.

Monographs

“Performing a Community Competitive Analysis,” *Economic Development Information System*, Niagara Economic and Tourism Corporation/Bell Canada Inc., 2011.

“Local Economic Impact Analysis,” (with C. Scott), *Economic Development Bulletin – New Series: Number 5*, Economic Development Program, University of Waterloo, 1996.

“Entrepreneurship and Community Based Economic Development,” (with L. Smith), *Economic Development Bulletin: Number 12*, Economic Development Program, University of Waterloo, 1992.

“Corporate Restructuring and Local Economic Development,” *Economic Development Bulletin: Number 11*, Economic Development Program, University of Waterloo, 1992.

“Planning in a Market Economy,” *Common Sense Economics*, 1983.

“Economic Planning and Regional Balanced Development,” *Working Paper Series: School of Urban and Regional Planning*, University of Waterloo, 1982.

Monographs Edited

Papers in Canadian Economic Development: Volume 12, (with P. Parker), Economic Development Program, University of Waterloo, 2010.

Papers in Canadian Economic Development: Volume 11, (with P. Parker), Economic Development Program, University of Waterloo, 2007.

Papers in Canadian Economic Development: Volume 10, (with J. Bater and P. Parker), Economic Development Program, University of Waterloo, 2005.

Papers in Canadian Economic Development: Volume 9, (with J. Bater and P. Parker), Economic Development Program, University of Waterloo, 2003.

“Strengthening the Downtown Management Plan: A Cooperative Approach to Community Economic Development,” *Economic Development Bulletin - New Series: Number 7*, (with J. Bater), Economic Development Program, University of Waterloo, 2001.

Papers in Canadian Economic Development: Volume 8, (with J. Bater), Economic Development Program, University of Waterloo, 2001.

“International Marketing Strategies for the Millennium – Considerations for Canadian Economic Developers,” *Economic Development Bulletin - New Series: Number 6*, (with J. Bater), Economic Development Program, University of Waterloo, 1999.

Papers in Canadian Economic Development: Volume 7, (with J. Bater), Economic Development Program, University of Waterloo, 1999.

“The Political Process and the Local Economic Development Professional,” *Economic Development Bulletin - New Series: Number 4*, (with J. Bater), Economic Development Program, University of Waterloo, 1997.

Papers in Canadian Economic Development: Volume 6, (with J. Bater), Economic Development Program, University of Waterloo, 1997.

“Bridging the Equity Gap: Venture Capital for Community Economic Development,” *Economic Development Bulletin - New Series: Number 3*, (with J. Bater), Economic Development Program, University of Waterloo 1996.

“Business Retention: A Local Economic Development Perspective,” *Economic Development Bulletin - New Series: Number 2*, (with J. Bater), Economic Development Program, University of Waterloo, 1996.

“Local Economic Development: Planning, Prospecting and Marketing,” *Economic Development Bulletin - New Series: Number 1*, (with J. Bater), Economic Development Program, University of Waterloo, 1996.

Papers in Canadian Economic Development: Volume 5, (with J. Bater) Economic Development Program, University of Waterloo, 1994.

Papers in Canadian Economic Development: Volume 4, (with P. Filion), Economic Development Program, University of Waterloo, 1993.

Monograph Reviews

“Cities and the Wealth of Nations,” by Jane Jacobs, in *Environments*, 1985.

“Planning and the Economy,” by A.G. Thornburn, in *Common Sense Economics*, 1985.

Papers Presented at Professional Conferences

“Asymetries in the Atlantic Canadian Labour Market During the Current Crisis,” (with J. Brox), *Atlantic Canadian Economics Association Conference*, St. John, New Brunswick, (October, 2009).

“Regional Employment Changes in a Booming Resource Economy,” (with J. Brox and J. MacKay), *International Banking, Economics, and Finance Association*, Honolulu, Hawaii, (2008).

“Regional Employment Changes in a Booming Resource Economy,” (with J. Brox and J. MacKay), *Canadian Regional Science Meetings*, Mississauga, (September, 2007).

“Testing Weak-Form Efficiency in Greater Toronto Area Residential Real Estate,” (with J. Brox and M. Duckett), *Western Economic Association International*, Seattle (June, 2007).

“An Application of the Regression Analogue of the Demographically Enhanced Shift-Share Model,” (with J. Brox), *Atlantic Canada Economics Association Meetings*, Fredericton, (September, 2001).

“A Demographically Augmented Shift-Share Employment Analysis: Atlantic Canada versus British Columbia,” (with J. Brox), *Canadian Regional Science Meetings*, Toronto, (June, 2000).

“A Demographically Augmented Shift-Share Analysis of Atlantic Canada Employment Trends,” (with J. Brox), *Atlantic Canada Economics Association Meetings*, Halifax, (October, 1999).

“Regional Youth Employment Patterns,” (with J. Brox), *Canadian Economics Association Meetings*, Ottawa, (May, 1998).

“Entrepreneurship in the New Reality,” (with J. Brox), *The Atlantic Challenge: Shaping the Future of Regional Development*, Moncton, (December, 1994).

“A Game Theoretic Approach to Regional Policy,” (with J. Brox), *The Twelfth Annual Meeting of the Canadian Regional Science Association*, Windsor, (June, 1988).

“Inter-Fuel Substitution in the Canadian Manufacturing Sector: Alternative Modelling Approaches,” (with A. Andrikopoulos and J. Brox), *The IASTED International Symposium of Applied Simulation and Modelling*, Vancouver, (June, 1986).

“Fiscal Policy in a Regional System,” (with J. Brox), *Canadian Economics Association Meetings*, Winnipeg, (May, 1986).

Other Scholarly Activities

Refereed journal articles submitted for publication consideration:

- *Applied Economics*
- *Canadian Journal of Regional Science*
- *Canadian Public Policy*
- *Environments*

Reviewed:

- Microeconomic and macroeconomic chapters of M. Parkin and R. Bade's introductory economics textbook for Addison-Wesley Publishers Limited.
- Shedd, Flanagan and Fellows introductory economics textbook for Harper and Row Publishers Limited.

Research Grants

University-Social Sciences and Humanities Research Council Grant

Academic Development Fund

SECTION B

Teaching Responsibilities

Graduate Courses

Regional Development Planning and Practice

Undergraduate Courses

Interregional Economics

Intermediate Microeconomics

Introductory Microeconomics and Macroeconomics

Off-Campus Teaching

Presentations on local and regional economic development and growth to economic development professionals across Canada.

Teaching Recognition

Recipient of Outstanding Performance Award (2006).

Recipient of Distinguished Teacher Award (2000).

Recipient of Economics Professor of the Year Award (1994).

PhD Thesis Reader

2010 Moosa, L., "Impacts of the Socio-Cultural Context of Rural Communities on ICT Adoption."

MA Research Paper Supervision

2010 Gustafsdottir, L., "The Role of Universities in the Development of Communities in Peripheral Regions."

2010 Anwar, F., "Relationship Between Population and Employment Trends in Selected Ontario Communities."

2007 Abulibdeh, A., "Toward Sustainable Operation for Municipal Infrastructure Assets."

2006 Khan, A., "Understanding Dimensions of Regional Poverty in Pakistan."

2006 Voll, M., "Financing Knowledge Based Firm Start-Ups with Local Private Investment."

- 2006 Masud, A., "Impact Assessment of Microfinance on Poverty Alleviation: A Case Study of Pakistan."
- 2004 Al-Ardan, N., "Should Informal Economic Activities be Considered in a Palestinian Economic Development Strategy?"
- 2004 Nicholson, R., "Public Policy Response to Relatively Low R & D in Canada."
- 2002 Suphal, A., "The Community Immigrant Task Force: Towards a Multicultural Local Economy and Labour Force."
- 2002 McClung, P., "Prioritization of Core Infrastructure: An Examination of Existing Methods."
- 2001 Becks, D., "A Shift-Share Analysis of the St. Catharines-Niagara CMA, 1987-1999."
- 2000 Joyce, S., "Household Hazardous Waste Management: Sustainable Development and Implications for Local Economic Development."
- 2000 Mak, J., "Brownfields: The Challenge of Redeveloping Contaminated Sites."
- 1997 Roe-Lucier, N., "An Evaluation of Strategic Economic Planning Models: A Case Study of Woolwich Township."
- 1997 VanLooyen, D., "An Estimate of the Economic Impact of Kitchener-Waterloo Oktoberfest on the Local Economy."
- 1996 Kubasta, D., "A University-Based Examination of the Transferability of the Japanese Technopolis Plan into Canada's Technology Triangle."
- 1996 Van Koughnett, S., "Universities, Knowledge Transfer and Local Economic Development."
- 1995 Wilcox, S., "Bird and Nature Conservation Planning: A Utilitarian and Human Ecological Approach – The Case of Long Point."
- 1995 Krupa, G., "Resource Utilization by the Construction Sector: An Input-Output Analysis."
- 1994 Hannah, D., "The Impact of the Dismantling of Supply Management in Hastings County."
- 1994 MacDonald, N., "Port of Halifax Competitive Study."
- 1993 Chih An Hsu, "The Role of Business Immigrants in the Canadian Economy."

- 1992 Scott, C., "Surviving a Closure: The Impact of the Potential Shutdown of a Dominant Sector on the Community of Atikokan and Senior Governments."
- 1992 Smith, F., "Identifying Trade Opportunities: A Case Study – Kitchener, Ontario."
- 1992 Mitchell, E., "The Theory and Practice of Strategic Planning in Local Economic Development: The Cases of Hamilton-Wentworth and Kitchener."
- 1991 Azzaarello, P., "The Impact of Growth on the Location of Printing, Publishing and Allied Industries in the Greater Toronto Area: 1980-1986."
- 1991 Lamirande, R., "Regional Economic Disparities: An Analysis of Northern Ontario."
- 1989 Khan, A., "Demand for Real Money Balances: Case Study of Canadian Manufacturing Industries."
- 1988 Chung, Y., "Alcoholic Beverage Consumption in Ontario: An Analysis Using Generalized Linear Expenditure System."
- 1988 Corbett P., "Energy Conservation: Measurement of Intent and Net Benefits for Canadian Industries."
- 1986 Lusetti, D., "An Application of Translog Production Structures for Analysis of the Canadian Manufacturing Sector."
- 1984 Rajapakse, P.J., "Problem of Underutilisation of Capital Manufacturing in Sri Lanka."
- 1982 Chowdhury, T.K., "Institutional Changes in Landless Farmers' Choice Under Semi-Feudalism: A Case Study of Bangladesh Agriculture."
- 1982 Golja, Bill, "An Average Residential Energy Demand Model for the Province of Ontario."
- 1982 Prempeh, A.K., "The Economic Dilemma in Canada: Alternatives for the Eighties."
- 1982 Fan, H., "Disaggregate Approach to the Demand for Housing in Canada."

MA Research Paper Examination Committee

- 2009 Hypes, J., "Innovation, Learning and Economic Development in Rural Regions: Understanding the Role of Social Capital in the Agrienergy Sector."
- 2008 Zeng, L., "The Impact of Goods and Services Tax on the Pattern of Canadian Consumer Spending."

- 2007 MacLaughlin, D., "Overcoming Latecomer Disadvantage: The Case of Taiwan's Wind Manufacturing Industry."
- 2007 Mackay, J., "Regional Employment Changes in a Booming Resource Economy."
- 2006 Trotter, R., "Trends and Economic Implications of Student Lodging Houses in the City of Waterloo."
- 2006 Lahey, P., "Implications of Creaming and its Effects on the Targeted Wage Subsidy Program."
- 2006 Gliedt, T., "Community Energy Management: Assessing a Greenhouse Gas Emissions Reduction Tool."
- 2005 Lussier, S., "Urban Transit Demand in Canada."
- 2004 Halliday, J., "Community Development in Crimea: An Explanation of the CIP Model of Community Development."
- 2003 Malkin, D., "Roads and Local Economic Development."
- 2003 Choi, D., "Local Economic Development and Community Training and Education: Perspectives on Workforce Development Issues."
- 2003 Poole, C., "The Impact of Employment Insurance Reform on Gappers."
- 2002 Duckett, M., "Testing Weak-Form Efficiency in Greater Toronto Area Residential Real Estate."
- 2002 Harford, L., "The Economic Significance of the Canadian Brewing Industry."
- 2002 Wojciechowski, M., "An Investigation of Social Networks in Knowledge-Based Rural Entrepreneurship."
- 2002 Van Kampen, D., "Economic Base Analysis Using LQ and MR Methods: A Study of Bruce County Ontario."
- 2001 Miller, J., "Public Participation in Strategic Planning: Enhancing Cross-Cultural Communication in Sioux Lookout."
- 2001 Narayan, V., "The Beechwood Park Homes Association: A Contingent Valuation of its Worth."
- 2001 Burns, K., "Investigating Barriers to Vehicle Reduction in Teleworking Households."

- 2001 Boseovski, J., "Human Capital, Evaluation and Local Economic Development Initiatives."
- 2001 Wood, G., "Regulatory Differences Affecting Ontario-Based Motor Carriers Operating in the California and Texas Lanes."
- 2001 Kanji, A., "Industrial Target Market Study of Quinti, Ontario."
- 2000 Anderson, S., "Local Economic Development Marketing Curriculum for Community Leaders."
- 2000 Cook, V., "The Risk Factors in Interprovincial Migration in Canada."
- 1999 Zelaya-Olivas, O., "Microcredit and Local Economic Development."
- 1999 Wissan, F., "The Effects of Physical Attractiveness on Income Attainment of Canadians."
- 1999 Denomme, M., "Continuity and Change: Production Restructuring and Labour Market Flexibility in the Food Processing Industry of Canada's Technology Triangle (CTT) and the City of Toronto."
- 1996 Newton, C., "A Study of the Canadian Youth Labour Market Using Shift-Share Analysis."
- 1996 Walsh, K., "An Examination of Economic and Environmental Linkages: Economic Impacts of Recreational Bathing Water Quality in the Village of Grand Bend, Ontario."
- 1995 Knapton, D., "Canada-United States Trade and its Effects on the Canadian Regions."
- 1995 Karasek, L., "Evaluating the Impact of Enterprise Education on Entrepreneurship: A Case Study of two Schools of the Western Integrated School Board."
- 1995 Carion, K., "The Impacts of Corporate Restructuring in a Single Industry Community: A Case Study of Flin Flon Manitoba."
- 1994 Brackman, C., "The Optimal Production of Estimated Devonian Natural Gas Reserves Under Perfect Competition."
- 1994 Dufault, B., "Coordination and Collaboration: Key Elements for Successful Community Economic Development in Renfrew County."
- 1994 Kershaw, D., "Economic Development Office Involvement in Japanese Direct Investment – A Case Study of the Toronto Region."
- 1993 Greenwell, B., "An Approach to Identifying Business Opportunities Using Commercial Sales Analysis."

- 1992 McCarron, D., “An Evaluation of an Approach to Implementing the Strategic Planning Process at the Community Level: A Case Study Analysis of Flamborough.”
- 1992 Nolan, R., “The Role of Internal Marketing in Local Economic Development.”
- 1992 Murr, M., “The Town of Markham’s International Business Survey – Understanding the Present and Future Directions of Local Export Development Strategy.”
- 1991 Hendry, C., “An Assessment of the Need, Role and Structure for an Economic Development Agency for Elmira and Woolwich Township.”
- 1991 Sewell, J., “Towards a Policy of Empowerment: The Resource Dependency Situation Within the Township of Michipicotin in Northeastern Ontario, and an Examination of the Provincial/Municipal Response.”
- 1985 Menezes, K., “Planning Infrastructure Development in a Mixed-Capitalist Economy: A Theory on the Growth of Government in Canada.”
- 1983 Hodgins, T., “Unemployment in the Niagara Region.”
- 1983 Brown, T., “The Dilemma of the Crow’s Nest Pass Freight Rates: A Study of Development and Planning in Canada.”

Senior Honours Essays Supervised

- 2014 Balogun, O., “A Comparative Analysis of Policy Initiatives in Sierra Leone and Rwanda Post Conflict.”
- 2014 Chan, M., “NBA Performance and Compensation: Analysis of Factors Determining Team Wins and Player Salary.”
- 2014 Reilly, N. “Modelling Growth with Heterogeneously Insecure Property Rights.”
- 2014 Li, H., “An Analysis on Canadian Household Debts.”
- 2013 Kitchlu, R., “Chromite Mining in the Ring of Fire: The Impact on Matawa First Nations’ Economies.”
- 2011 Yusuf, E., “Current and Proposed State of Entrepreneurship in Pakistan.”
- 2010 Lin, J., “Sports Stadium Subsidies: A Cost Benefit Analysis.”
- 2008 Moudrak, N., “Subsidizing Ontario Auto Industry: Throwing Good Money After Bad.”

- 2008 Dick, B., “Impact of Not For Profit Organizations on Community Economic Development.”
- 2008 Diwan, M., “Pakistan: Economic Development Prospects.”
- 2007 Stormes, R., “Role of Microfinance in Alleviating Poverty in Bangladesh.”
- 2007 DePratto, B., “World Bank Development Lending in Africa – Does it Have an Impact?”
- 2006 Clerk, J., “Development Strategies and Perspectives – An Interregional Comparison: East Asia, Latin America, Africa.”
- 2006 Hypes, J., “The Impact of Arts and Culture Organizations on Local Economic Development.”
- 2002 DeJong, M., “Measuring Canada’s Regulatory Burden: A Sectoral Approach.”
- 2000 Chance, M., “The Role of NGOs in Third World Economic Development.”
- 1999 Weinstein, J., “A Shift-Share Analysis of the Northern Ontario Economy.”
- 1986 Chang, J., “Transportation Development and Socio-Economic Implications for Urban Growth.”
- 1985 Fancavilla, J., “An Analysis of Main Street Development.”
- 1985 Adams, S., “Kingsway College Wood Biomass-Fuelled Central Heating System: A Technical and Economic Evaluation.”

SECTION C

Administrative Responsibilities

Department

Associate Chair, Undergraduate Affairs (1991-1996 and 1999-2000).

Department of Economics Promotion and Tenure Committee (1999-2000).

Department of Economics Hiring Committee (1999-2000).

Convenor of the Business and Economics Educators Conference (1984-1996).

Faculty

Associate Dean of Arts, Co-op, Administration and Planning (2000-present).

Faculty of Arts Strategic Plan (2012-2014).

Chair of the Faculty of Arts Co-operative Programs Advisory Committee (2000-present).

Co-Chair, Arts Endowment Fund (2000-present).

Faculty of Arts Admissions Committee (1992-1996 and 2000-present).

Faculty of Arts Undergraduate Affairs Group (1991-1996 and 1999-present).

Faculty of Arts Co-operative Programs Advisory Committee (1984-1996).

Arts Faculty Council Executive (1986-1988).

Faculty of Arts Examinations and Standings Committee (1982-1987).

University

Co-operative Education Council (2005-present).

Advisory Committee on Continuing Education (2006-present).

Advisory Committee on Distance/Online Education (2006-2009).

Senate Undergraduate Council (2000-present).

WatCACE Research Funding Program (2011 and 2012).

Distinguished Teacher Award: Faculty Representative (2000-present).

University Strategic Plan: Experiential Education Working Group (2013 and 2014).

FUAC Funding Working Group (2012-2014).

X and Business Programs Committee (2008, 2009, and 2014).

Masters of Applied Environmental Studies – Local Economic Development Entrance Committee (1988-2005).

Assistant Director of the Economic Development Program (1986-present).

Economic Development Program Co-ordinator (1986-present).

Economic Development Program Course Selection Committee (1986-present).

Community

Assessing Economic Performance of Rural and Small Communities for the Ontario Ministry of Agriculture, Food and Rural Affairs (1999).

Curriculum Development Committee for the Council for the Advancement of Native Development Officers (1995-1996).

Woolwich Township Economic Development Committee (1996-1998).