Curriculum Vitae

Jesus C. Dumagan

Affiliate Professor, School of Economics Consultant, Angelo King Institute for Economic and Business Studies De La Salle University 2401 Taft Avenue 1004 Manila, Philippines email: <u>jesus.dumagan@dlsu.edu.ph</u> or <u>jcdcu91@yahoo.com</u>

EDUCATION & SCHOLASTIC AWARDS

Degrees

- Ph.D., Applied Economics, 1991, Cornell University, Ithaca, NY, USA; awarded a Department of Applied Economics & Management (formerly Department of Agricultural, Resource and Managerial Economics) assistantship, 1987-91; and elected to *Phi Kappa Phi* Honor Society, 1991.
- M.A., Economics, 1975, University of Minnesota, Minneapolis, MN, USA; awarded a Fulbright-Hays Fellowship, 1973-75 by the U.S. Department of State through the Philippine-American Educational Foundation.
- B.A., History, 1964, *Summa Cum Laude*, University of Southern Philippines, Cebu City; awarded a University Scholarship, 1960-64.

Courseworks

- Ph.D., Economics, 1976-77, University of Minnesota, Minneapolis, MN, US; awarded a Department of Economics assistantship.
- M.A., Economics, 1964-65, University of the Philippines, Diliman; awarded a University of the Philippines Economics Program Fellowship from the Rockefeller Foundation.

RESEARCH INTERESTS

Primary: Applied microeconomics; productivity analysis. **Secondary:** Energy economics; applied econometrics.

- **ON-GOING RESEARCH:** Under the auspices of the DLSU Office of the Vice Chancellor for Research and Innovation and implemented by the Angelo King Institute for Economic and Business Studies (AKI)
 - AKI Research Grant, Project Account 600-409: Prepare a report, "Consistencyin-Aggregation of GDP Indexes and Relative Price Effects on Growth of GDP

and Aggregate Labor Productivity"; preliminary results presented at the 54th Philippine Economic Society Annual Meeting, Novotel Manila, 8 November 2016; to be completed by April 15, 2017.

Philippine Economic Monitor (PEM), Project Account 500-138: Assist project leader by reviewing quarterly and year-end PEM reports and prepare a technical note, "Re-examining Growth Contributions of Demand-Side Components of Philippine GDP" as part of the year-end PEM report; to be completed by July 31, 2017.

JOURNAL PUBLICATIONS

Dumagan, Jesus C. and Bert M. Balk (2016), "Dissecting Aggregate Output and Labour Productivity Change: A Postscript on the Role of Relative Prices," *Journal of Productivity* Analysis 45 (1), 117-119 (first published online 5 February 2015, DOI 10.1007/s11123-015-0433-3).

(2013), "A Generalized Exactly Additive Decomposition of Aggregate Labor Productivity Growth," *Review of Income and Wealth* 59 (1), 157-168 (first published online 14 June 2012, DOI: 10.1111/j.1475-4991.2012.00511.x). An earlier version was circulated as DP 2011-19, Philippine Institute for Development Studies, Makati City.

and V. Eldon Ball (2009), "Decomposing Growth in Revenues and Costs into Price, Quantity, and Total Factor Productivity Contributions," *Applied Economics* 41 (23), 2943-2953.

(2008), "Avoiding Anomalies of GDP in Constant Prices by Conversion to Chained Prices: Accentuating Shifts in Philippine Economic Transformation," *Philippine Journal of Development* 35 (2), 1-28.

(2002), "Comparing the Superlative Törnqvist and Fisher Ideal Indexes," *Economics Letters* 76 (2), 251-258.

_____ and Timothy D. Mount (1997), "Approximating Compensated Income from Ordinary Demand Functions," *Economics Letters* 55 (2), 191-201.

______ and _____ (1996), "Global Properties of Well-Behaved Demand Systems: A Generalized Logit Model Specification," *Economic Modelling* 3 (2, April), 235-256.

and ______ (1993), "Welfare Effects of Improving End-Use Efficiency: Theory and Applications to Residential Electricity Demand," *Resource and Energy Economics* (formerly *Resources and Energy*) 15 (2, June), 175-201.

and ______ (1992), "Measuring the Consumer Welfare Effects of Carbon Penalties: Theory and Applications to Household Energy Demand," *Energy Economics* 14 (April), 82-93.

OTHER PUBLICATIONS

Teruel, Romeo G. and Jesus C. Dumagan (2014), "Total Factor Productivity Growth in Philippine Agriculture," Chapter 8 in (eds.) Briones, Roehlano M., Mercedita A. Sombilla and Arsenio M. Balisacan, *Productivity Growth in Philippine Agriculture*, SEARCA, DA-BAR, and PhilRice, pp. 153-178.

Henry, David and Jesus C. Dumagan (2004), "Economic Impacts: The Growing Use of Information Technology in Infrastructure Industries" in (eds.) Zimmerman, Rae and Thomas Horan, *Digital Infrastructures: Enabling Civil and Environmental Systems Through Information Technology*, New York: Routledge, pp. 155-178.

Dumagan, Jesus C., Gurmukh S. Gill, and Cassandra Ingram (December 2003), "Industry-Level Effects of Information Technology Use on Overall Productivity," *Digital Economy 2003*, Economics and Statistics Administration (Washington, D.C.: U.S. Department of Commerce).

and Gurmukh S. Gill (February 2002), "Industry-Level Effects of Information Technology Use on Productivity and Inflation," *Digital Economy 2002*, Economics and Statistics Administration (Washington, D.C.: U.S. Department of Commerce).

_____, and Susan LaPorte (June 2000), "Contribution of Information Technology To U.S. Productivity Growth," *Digital Economy 2000*, Economics and Statistics Administration (Washington, D.C.: U.S. Department of Commerce).

______, and ______ (June 1999), "Contribution of Information Technology To Gross Product Originating Per Worker," *The Emerging Digital Economy II*, Economics and Statistics Administration (Washington, D.C.: U.S. Department of Commerce).

and John W. Hackett (1995), "Almost Half of the Food Budget Is Spent Eating Out," *FoodReview*, Economic Research Service (Washington, D.C.: U.S. Department of Agriculture) 18 (1, January-April), 37–39.

and ______ (1995), *U.S. Trends in Eating Away From Home, 1982-89*, Statistical Bulletin Number 926 (December), Economic Research Service (Washington, D.C.: U.S. Department of Agriculture).

WORKING PAPERS & OTHER REPORTS

Dumagan, Jesus C. (2016), "Effects of Relative Prices on Contributions to the Level and Growth of Real GDP," *Working Paper Series* No. 2016-036, Manila: DLSU-Angelo King Institute for Economic and Business Studies; funded by AKI Research Grant (Project Account No. 600-409); an earlier version was presented at the DLSU Research Congress, March 7-9, 2016.

(2014), "An Alternative Framework for Sectoral Contributions to GDP Level and Growth," *Working Paper Series* No. 2014-09, Manila: DLSU-Angelo King Institute for Economic and Business Studies.

(2014), "Consistent Level Aggregation and Growth Decomposition of Real GDP," *Working Paper Series* No. 2014-08, Manila: DLSU-Angelo King Institute for Economic and Business Studies.

_____ (2013), "Relative Price Effects on Decompositions of Change in Aggregate Labor Productivity," DP 2013-44, Philippine Institute for Development Studies, Makati City.

(2013), "Aggregate Labor Productivity as the Driver of Real Per Capita GDP: A New Look at Philippine Economic Transformation, 2002-2011," mimeo., Report to the Asian Development Bank and National Economic Development Authority [TA-7806 PHI: Results-Oriented Strategic Planning and Development Management for Inclusive Growth: Estimating Aggregate Labor Productivity Across Sectors (43203-012)].

_____ (2012), "Consistent GDP Aggregation and Purchasing Power Parity," DP 2012-02, Philippine Institute for Development Studies, Makati City.

(2011), "Implementing Weights for Additivity of Chained Volume Measures in the National Accounts," DP No. 2011-9, Philippine Institute for Development Studies, Makati City.

(2011), "Deriving Weights for Additivity of Chained Volume Measures in the National Accounts," DP 2011-8, Philippine Institute for Development Studies, Makati City.

_____ (2011), "A Generalized Exactly Additive Decomposition of Aggregate Labor Productivity Growth," DP No. 2011-19, Philippine Institute for Development Studies Makati City.

(2010), "Computing Additive Chained Volume Measures of GDP Subaggregates," DP 2010-16, Philippine Institute for Development Studies, Makati City.

and Michael M. Alba (2010), "Measuring Regional Price Responses of Input Demands and Output Supplies in Philippine Agriculture: Model Description and Empirical Results," Draft Final Report, Philippine Institute for Development Studies, Makati City.

Teruel, Romeo G. and Jesus C. Dumagan (2010), "Measuring and Explaining Total Factor Productivity Growth and Patterns in Philippine Agriculture: A Regional Panel Data Framework," Draft Final Report, A Project of the *Productivity Group in Philippine Agriculture s*ponsored by the Southeast Asian Regional Center for Graduate Study and Research in Agriculture, University of the Philippines, Los Baños.

Dumagan, Jesus C. (2009), "Comparing GDP in Constant and in Chained Prices: Some New Results," DP 2009-08, Philippine Institute for Development Studies, Makati City.

(2008), "Implementing US GDP in Chained Prices for Crosscountry GDP Growth and Sectoral Comparisons: Application to Selected ASEAN Countries," DP 2008-28, Philippine Institute for Development Studies, Makati City.

(2008), "Avoiding Anomalies of GDP in Constant Prices by Conversion to Chained Prices: Accentuating Shifts in Philippine Economic Transformation," DP 2008-24, Philippine Institute for Development Studies, Makati City.

(August 2003), "The Exact Formula for Real Shares in the Chained-Dollar Framework," mimeo., Office of Policy Development, Economics and Statistics Administration (Washington, D.C.: U.S. Department of Commerce).

______, Dennis Pastore, and Sabrina Montes (May 2003), "Economic Impact of a Terrorist Attack on the Houston Ship Channel," mimeo., Office of Policy Development, Economics and Statistics Administration (Washington, D.C., U.S. Department of Commerce).

(August 2002), "Exact Income-Side Contributions to Percent Change in GDP," mimeo., Office of Policy Development, Economics and Statistics Administration (Washington, D.C.: U.S. Department of Commerce).

and Timothy D. Mount (1997), "Re-examining the Cost-of-Living Index and the Biases of Price Indices: Implications for the U.S. CPI," ESA/OPD 97-5 (June), Economics and Statistics Administration (Washington, D.C.: U.S. Department of Commerce).

______and _____(1995), "A New Algorithm for Computing Compensated Income from Ordinary Demand Functions," Working Paper 95-14, Department of Agricultural, Resource and Managerial Economics, Cornell University.

(1995), "Re-examining the Cost-Effectiveness of the Research and Experimentation Tax Credit," ESA/OPD 95-1 (June), Economics and Statistics Administration (Washington, D.C.: U.S. Department of Commerce).

and Lester H. Myers (1992), "Food-Away-From-Home Analysis Using NPD Restaurant Consumer Survey Data," paper presented at the symposium on <u>Data Needs for Food-Away-From-Home Analyses</u>, 1992 Annual Meeting of the American Agricultural Economics Association, Baltimore. ______ and Timothy D. Mount (October 1991), "Measuring Hicksian Welfare Changes from Marshallian Demand Functions," Agricultural Economics Research 91-10, Department of Agricultural, Resource and Managerial Economics, Cornell University.

______ and ______ (February 1990), "Global Properties of the Logit, Translog and Almost Ideal Demand Systems," Working Paper 90-3, Department of Agricultural, Resource and Managerial Economics, Cornell University.

(1989), "A Money Metric Measure of Welfare Change From Multiple Price and Income Changes," Working Paper 89-6 (August), Department of Agricultural, Resource and Managerial Economics, Cornell University; winner of a *George F. Warren Outstanding Graduate Student Paper Award*.

(1987), "Interutility Capacity Exchanges Among the Participants in the Mid-Continent Area Power Pool," Minnesota Department of Energy and Economic Development.

(1987), "Impacts of the Proposed Purchase of Electricity From Manitoba Hydro on the 1986 Advance Forecast of the Minnesota/Wisconsin Power Suppliers Group," Minnesota Department of Energy and Economic Development.

(1986), "Assessment of the Proposal by the Upper Mississippi Power Group to Import Electricity from Manitoba Hydro," Minnesota Department of Energy and Economic Development.

PROFESSIONAL ACTIVITIES

Journal Referee

Applied Economics American Journal of Agricultural Economics DLSU Business & Economics Review Economics Letters Economic Modelling Energy Journal Journal of Agricultural and Resource Economics Review of Agricultural Economics Review of Income and Wealth

Editorial Board Member

DLSU Business & Economics Review Philippine Journal of Development

Research Advisory Panel Member and Research Projects Mentor

East Asian Development Network

Conference/Seminar Paper Presenter or Workshop Resource Speaker (Since 2008)

Ateneo de Manila University Bangko Sentral Ng Pilipinas Bureau of Agricultural Statistics De La Salle University East Asian Development Network East Asian Economic Association National Convention on Statistics National Statistics Office National Economic Development Authority Philippine Economic Society Philippine Institute for Development Studies Southeast Asian Regional Center for Graduate Study and Research in Agriculture Statistical Research and Training Center University of the Philippines-Diliman

Consultant

Angelo King Institute for Economic and Business Studies Asian Development Bank National Economic Development Authority Southeast Asian Regional Center for Graduate Study and Research in Agriculture

ACADEMIC & NON-ACADEMIC WORK EXPERIENCE

Affiliate Professor, Adjunct Professor, September 2015-Present Visiting Distinguished Professor, September 2014-May 2015 School of Economics, De La Salle University, Manila

- Taught graduate level courses, "Special Topics in Microeconomics" and "Advanced Microeconomics."
- Prepared technical reports on aggregation and growth decomposition procedures applied to the Philippine national income and product accounts (listed in Working Papers).
- Presented papers in conferences, seminars, and workshops (e.g., 2016, 2015, and 2014 PES Annual Meetings, DLSU SOE seminars, DLSU Research Congress and NEDA workshop).

Visiting Senior Research Fellow, May 2008-August 2014 Philippine Institute for Development Studies, Makati

- Consultant, 2013, Asian Development Bank and National Economic Development Authority [TA-7806 PHI: Results-Oriented Strategic Planning and Development Management for Inclusive Growth: Estimating Aggregate Labor Productivity Across Sectors].
- Editorial Board Member, 2011-Present, Philippine Journal of Development.
- Advisory Panel Member and Research Project Mentor, 2010-Present, *East Asian Development Network.*
- National Evaluation Committee Member, 2011, Commission on Higher Education (CHED) 2010 *Best Research Programs in Philippine Higher Education Institutions*.
- Resource Person, 2010, *Workshops on the Operationalization of Chain-Type GDP and Price Indexes* at Bangko Sentral ng Pilipinas, Statistical Research and Training Center, National Statistics Office, and Bureau of Agricultural Statistics.
- Resource Person, 2008-2009, *Productivity Group in Philippine Agriculture*, Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA), University of the Philippines, Los Baños.
- Official Reviewer, April 2009, "Methodologies to Compute Geographic (Spatial) Price Index for the Poor," National Statistics Office (funded by SEARCA).
- Principal Researcher, "Measuring Regional Price Responses of Input Demands and Output Supplies in Philippine Agriculture: Model Description and Empirical Results," Draft Final Report, February 2010, Philippine Institute for Development Studies, Makati (funded by SEARCA).
- Research Collaborator, "Measuring and Explaining Total Factor Productivity Growth and Patterns in Philippine Agriculture: A Regional Panel Data Framework," Draft Final Report, February 2010, .a project of the *Productivity Group in Philippine Agriculture* (funded by SEARCA).
- Conducted independent analytical and empirical studies (listed in Working Papers).

Senior Economist, 2001-Retired December 2005 Economist, 1995-2000

Office of Policy Development, Office of the Chief Economist Economics and Statistics Administration U.S. Department of Commerce, Washington, D.C.

- Prepared technical reports on aggregation and growth decomposition procedures applied to the national income and product accounts.
- Participated in interagency working groups on economic issues related to trade and homeland security.
- Contributed chapters on the impacts of information technology (IT) on U.S.

labor productivity growth in the 1999, 2000, 2002, and 2003 Department of Commerce reports on the "digital economy."

- Devised procedures for aggregate labor productivity growth decomposition into contributions of IT on U.S. industries.
- Prepared report examining U.S. CPI biases in measuring the true cost-ofliving and exploring their implications on proposed CPI revisions.
- Carried out U.S. macroeconomic model simulations to examine issues of current interest, e.g., impacts of alternative budget proposals and effects of trade related policies.

Economist, 1992-94

Food and Consumer Economics Division, Economic Research Service U.S. Department of Agriculture, Washington, D.C.

- Prepared reports on trends in U.S. household consumption of ready-to-eat food away from home.
- Developed procedures for costs of commercially prepared meals and snacks, by type of food and type of eating establishment.

Visiting Lecturer/Consultant, 1993 (on leave from U.S. Dept. of Agriculture) Transfer of Knowledge Through Expatriate Nationals, United Nations Development Programme

- Taught graduate level course, "Theory of Consumer Behavior and Applied Demand Analysis," Department of Economics, Ateneo de Manila University, Loyola Heights, Quezon City.
- Prepared lecture series on demand analysis at the Philippine Institute for Development Studies, Makati.
- Served as consultant on energy conservation, demand side management, and integrated resource planning to the Department of Energy, Philippines.

Economist, 1991-92

Resources and Technology Division, Economic Research Service U.S. Department of Agriculture, Washington, D.C.

- Compiled data on inputs for each Agricultural Statistical District in each state as part of U.S agricultural database.
- Assisted in developing U.S. agricultural productivity indexes.

Graduate Research/Teaching Assistant, 1987-91

Department of Applied Economics and Management Cornell University, Ithaca, NY

- Formulated and estimated empirical models of consumer demand and welfare change measures with specific application to residential energy consumption.
- Assisted in preparing/grading exercises and examinations in graduate course

in applied econometrics and undergraduate course in decision analysis.

Senior Rates Analyst, 1987

Minnesota Public Utilities Commission, St. Paul, MN Senior Economic Analyst, 1983-86

Minnesota Department of Energy & Economic Development, St. Paul, MN Economic Analyst, 1977-82

Minnesota Energy Agency, St. Paul, MN

- Coordinated inter-agency formulation and implementation of mandates of the Minnesota Energy and Economic Development Authority.
- Led report preparation for the Legislative Commission on Minnesota Resources on barriers to development of alternative energy in Minnesota.
- Developed cost-effectiveness criteria for state energy efficiency standards.

Instructor, 1979-80

Extension Division, University of Minnesota, Minneapolis, MN

Graduate Teaching Associate, 1975-77

Department of Economics, University of Minnesota, Minneapolis, MN

Instructor, 1969-1973

Department of Economics, Ateneo de Manila University

Instructor, 1965-68

School of Economics, University of the Philippines, Diliman

• Taught introductory and intermediate Macroeconomics, Microeconomics, International Trade, and Money & Banking.