Academic Program Review:
August 2016
Title: Masters of Science in Economics & Finance
Specialization: Graduate program
Department and College: Department of Economics and Finance, College of Business
Department Chair: Edward B. Barbier, ebarbier@uwyo.edu, 307-766-2358

Part I – Program Review

1. Program Demand
   a. Number of graduates over the past five-year period: 8 (AY2010-11 to AY 2014-2015)\(^1\)
   b. Enrollment in program over past five-year period: 28 (AY2010-11 to AY 2014-2015)\(^2\)

2. Program Quality
   a. Program accreditation
      i. Program is accredited through the college accreditation with the Association to Advance Collegiate Schools of Business (AACSB).
      ii. Most recent accreditation date: October 2010
      iv. List of recommendations from past visit: Complete and document program assessment plan and outcomes. This was part of a general requirement for the entire college. Visit date: Fall, 2015.
   b. Faculty Credentials
      i. List of faculty
         1. David Aadland, PhD, Economics, Associate Professor
         2. Heidi J. Albers, PhD, Economics, Knobloch Wyoming Excellence Chair in Conservation Economics and Finance
         3. Suman Banerjee, PhD Finance, Associate Professor
         4. Edward B. Barbier, PhD Economics, John S. Bugas Professor of Economics
         5. Nicole Choi, PhD Finance, Associate Professor

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\(^1\) From “Degrees – dup Master” Excel Spreadsheet, Academic Affairs, 6/21/2016.
\(^2\) From “2016 MS Program Assessment Data”, Excel Spreadsheet, Department of Economics & Finance, 7/20/2016
6. Timothy Considine, PhD Economics, School of Energy Resources
   Professor of Energy Economics
7. David C. Finnoff, PhD Economics, Director of Undergraduate Studies,
   Associate Professor
8. Benjamin Gilbert, PhD Economics, Assistant Professor
9. Robert W. Godby, PhD Economics, Director for Energy Economics &
   Public Policies Center; Associate Professor
10. Sridhar Gogineni, PhD Finance, Assistant Professor
11. Thorsten Janus, PhD Economics, Associate Professor
12. Charles F. Mason, PhD Economics, H.A. "Dave" True, Jr. Professor of
   Petroleum and Natural Gas Economics
13. Owen R. Phillips, PhD Economics, Associate Dean, Professor
14. Sherrill Sharrer, PhD Economics, Guthrie Distinguished Professor
15. Jason Shogren, PhD Economics, Stroock Professor of Natural Resource
   Conservation and Management
16. Alexandre Skiba, PhD Economics, Associate Professor
17. Frederic P. Sterbenz, PhD, Economics, Professor
18. Klaas T. van’t Veld, Director of Graduate Studies, Associate Professor

ii. Gender, ethnicity breakdown

<table>
<thead>
<tr>
<th>Name</th>
<th>Gender</th>
<th>Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>David Aadland</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Heidi J. Albers</td>
<td>Female</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Suman Banerjee</td>
<td>Male</td>
<td>Asian</td>
</tr>
<tr>
<td>Edward B. Barbier</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Nicole Choi</td>
<td>Female</td>
<td>Asian</td>
</tr>
<tr>
<td>Timothy Considine</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>David C. Finnoff</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Benjamin Gilbert</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Sridhar Gogineni</td>
<td>Male</td>
<td>Asian</td>
</tr>
<tr>
<td>Robert W. Godby</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Pawan Jain*</td>
<td>Male</td>
<td>Asian</td>
</tr>
<tr>
<td>Thorsten Janus</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Charles F. Mason</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Owen R. Phillips</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Sherrill Shaffer*</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Jason Shogren</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Alexandre Skiba</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Frederic P. Sterbenz</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Klaas T. van’t Veld</td>
<td>Male</td>
<td>Caucasian</td>
</tr>
</tbody>
</table>

*Shaffer retired June 2016; Jain begins Fall 2016.
iii. Grants awarded
Since 2012 (through 2015) external research grants to the Department of Economics and Finance have totaled over $1.2 million, and in 2015 they totaled $443,635. In 2016 grants are anticipated to total $505,015.

<table>
<thead>
<tr>
<th>Faculty member/Grant</th>
<th>Award</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barbier New Orleans Coastal</td>
<td>$28,000</td>
<td>FY12</td>
</tr>
<tr>
<td>Finnoff Forest Service</td>
<td>$96,000</td>
<td>FY12</td>
</tr>
<tr>
<td>Finnoff Wildlife Trust</td>
<td>$25,000</td>
<td>FY12</td>
</tr>
<tr>
<td>Tschirhart U of Maryland</td>
<td>$50,000</td>
<td>FY12</td>
</tr>
<tr>
<td>Godby Wy Legis Svcs</td>
<td>$12,000</td>
<td>FY12</td>
</tr>
<tr>
<td>Godby Prevailing Wage</td>
<td>$38,351</td>
<td>FY12</td>
</tr>
<tr>
<td>Godby Prevailing Wage</td>
<td>$48,486</td>
<td>FY13</td>
</tr>
<tr>
<td>Pike EcoHealth Alliance</td>
<td>$7,000</td>
<td>FY13</td>
</tr>
<tr>
<td>Considine Dept of Commerce</td>
<td>$65,000</td>
<td>FY13</td>
</tr>
<tr>
<td>Considine Dept of Commerce</td>
<td>$66,150</td>
<td>FY14</td>
</tr>
<tr>
<td>Considine State of Wyoming</td>
<td>$52,000</td>
<td>FY14</td>
</tr>
<tr>
<td>Godby Prevailing Wage</td>
<td>$49,492</td>
<td>FY14</td>
</tr>
<tr>
<td>Godby WIA Impacts of Coal</td>
<td>$71,250</td>
<td>FY14</td>
</tr>
<tr>
<td>Godby School Facilities</td>
<td>$50,000</td>
<td>FY14</td>
</tr>
<tr>
<td>Barbier DGI/ELDI</td>
<td>$100,000</td>
<td>FY14</td>
</tr>
<tr>
<td>Finnoff ASU</td>
<td>$148,800</td>
<td>FY15</td>
</tr>
<tr>
<td>Godby DOE</td>
<td>$126,000</td>
<td>FY15</td>
</tr>
<tr>
<td>Shogren Weber State</td>
<td>$30,000</td>
<td>FY15</td>
</tr>
<tr>
<td>Considine Koch Markets</td>
<td>$51,000</td>
<td>FY15</td>
</tr>
<tr>
<td>Considine Tolling Fees</td>
<td>$35,000</td>
<td>FY15</td>
</tr>
<tr>
<td>Godby Prevailing Wage</td>
<td>$52,835</td>
<td>FY15</td>
</tr>
<tr>
<td>Finnoff Great Lakes</td>
<td>$95,000</td>
<td>FY16</td>
</tr>
<tr>
<td>Godby Prevailing Wage</td>
<td>$53,000</td>
<td>FY16</td>
</tr>
<tr>
<td>Godby/MBT Tetra Tech</td>
<td>$10,000</td>
<td>FY16</td>
</tr>
<tr>
<td>Shogren CBEAR John Hopkins</td>
<td>$19,500</td>
<td>FY16</td>
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<tr>
<td>Godby Prevailing Wage</td>
<td>$52,715</td>
<td>FY16</td>
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<tr>
<td>Godby DOE</td>
<td>$126,000</td>
<td>FY16</td>
</tr>
<tr>
<td>Finnoff ASU</td>
<td>$148,800</td>
<td>FY16</td>
</tr>
</tbody>
</table>

**Total (2012-2016)** $1,558,579

iv. Grants applied for
Data are not available.
v. Publications/presentations by academic personnel (2010-2015)

Summary: All Program Faculty (2010-2015)
Papers: 308
Presentations: 236

David Aadland:
Papers
Refereed Journal Articles
Presentations
Optimal Wildlife Management in the Greater Yellowstone Ecosystem
Association of Environmental and Resource Economics Summer Meetings, 2015
Pathways 2014 Conference, October 2014
The Economics of Emergency Meetings
Eastern Economic Association Annual Meetings, 2013
Time Compression
Midwest Economic Annual Meetings, 2012
Eastern Economic Association Annual Meetings, 2011
South Dakota State University, 2011
Mountain Pine Beetle Epidemics
Western Economics Association Meetings, 2010.

Heidi J. Albers:
Papers
Refereed Journal Articles


Refereed Chapters in Books


Presentations


“Putting people into the management of Marine Protected Areas, with examples from Tanzania: Opportunities for an EfD Thematic Program on MPAs.” EfD Annual Meeting. Arusha, Tanzania. October, 2011.


Suman Banerjee:
Papers
Refereed Journal Articles


Presentations
- SELS Global Junior Empirical Legal Scholars Workshop on at the Hebrew University of Jerusalem, December 17th and 18th 2015.*
- 10th Annual Conference on Empirical Legal Studies, School of Law, Washington University, Saint Louis, October 2015.
- Australian Banking and Finance Conference at University of New South Wales, Sydney, Australia, December 17th and 18th 2015.
• FMA Annual Meeting, Nashville, October 2014.
• The Annual Conference on Asia-Pacific Financial Markets, Seoul, Korea, December 2014.*
• FMA Annual Meeting, Orlando, Florida, October 2015.
• The Asian Bureau of Finance and Economics Research (ABFER), Singapore, May 2014.
• FMA Europe Annual Meeting, Venice, Italy, June, 2015.

Edward B. Barbier:
Papers
Refereed Journal Articles
11


http://www.plosone.org/article/info:doi/10.1371/journal.pone.0058715


Books

Refereed Chapters in Books


Presentations
Barbier, E.B. “Nature and Wealth: Overcoming Environmental Scarcity and Inequality.” Guest Lecture, Discovery Themes, Ohio State University, Columbus, Ohio, USA, November 6, 2015.
Barbier, E.B. “Is the income elasticity of the willingness to pay for pollution control constant?”
Barbier, E.B. “Climate Change Impacts on Rural Poverty in Low-Elevation Coastal Zones.”


Barbier, E.B. “Structural Change, Marginal Land and Economic Development in Latin America and the Caribbean” Keynote Address, Workshop on Environmental and Development Economics in Latin America, CIDEM, Mexico City, Mexico, October 4-5, 2013.


Barbier, E.B. “A Spatial Model of Coastal Ecosystem Services.” Seminar, National Socio-Environmental Synthesis Center (SESYNC), Annapolis, MD, January 11, 2013.


Nicole Choi:
Papers
Refereed Journal Articles

Presentations
- Northern Finance Association annual meeting, Lake Louise, AB, 2015
- Financial Management Association annual meeting, Nashville, TX, 2014
- Academy of Behavioral Finance and Economics annual meeting, Chicago, IL, 2013
- Asian Financial Management Association annual meeting, Phuket, Thailand, 2012
- Academy of Behavioral Finance and Economics annual meeting, New York, NY, 2012
- Midwest Finance Association annual meeting, New Orleans, LA, 2012
- Northern Finance Association annual meeting, Vancouver, Canada, 2011
- Asian FMA annual meeting, Queenstown, New Zealand, 2011
• Southern Finance Association annual meeting, Asheville, NC, 2011
• Financial Management Association annual meeting, New York, NY, 2010

Timothy Considine:

Papers

Refereed Journal Articles


Refereed Chapters in Books


Presentations


“The power of primary fuels in North America,” King Fahd University, Dhahran, Saudi Arabia, February 2014.

“The shale revolution: blessing or curse?” University of Wyoming, Saturday University, Gillette, Wyoming, January 2013.
“Balancing economic benefits with environmental impacts of shale gas,” Ohio State University, webinar, February 2012.
“Powering California: Choices and trade-offs,” University of Southern California, Los Angeles, CA, November 2011.
“Balancing economic benefits with environmental impacts of shale energy development,” Quebec Oil and Gas Association, Montreal, Quebec, October 2011.
“Balancing economic benefits with environmental impacts of shale energy development, University of Calgary, Calgary, Alberta, September 2011.
“PRB coal powering America,” Rocky Mountain Coal Mining Institute, Sheridan, WY, September 2010.

David C. Finnoff
Papers
Refereed Journal Articles


Refereed Chapters in Books


Presentations
“Opposing irreversibilities in environmental policy: Avoiding the point of no return or delaying the inevitable,” Association of Environmental and Resource Economists (AERE) annual meeting, San Diego, CA, June 2015.
Scientific Committee Meeting for The ecoHEALTH project, DIVERSITAS Future Earth Meeting, Seville, Spain, September 2014.
“Opposing irreversibilities in environmental policy: Avoiding the point of no return or delaying the inevitable” American Fisheries Society Annual Meeting, Quebec, Canada August 2014.
“Managing the Endogenous Risk of Disease Outbreaks with a Non-Constant Background Hazard Rate” MASspread Annual Workshop, Princeton, New Jersey, April 2014.
“Framework for a Coupled Ecological-Economic Model of the Chesapeake Bay Watershed” (with John Tschirhart) Chesapeake Bay Sustainable Fisheries Goal Implementation Team, Solomons, Maryland, December 2013.
“Framework for a Coupled Ecological-Economic Model of the Chesapeake Bay Watershed” (with John Tschirhart) invited talk at NOAA Headquarters, Silver Spring, Maryland, December 2013.
“Managing the Endogenous Risk of Disease Outbreaks with a Non-Constant Background Hazard Rate” Association of Environmental and Resource Economists (AERE) annual meeting, Banff Canada, June 2013.
Discussant, BESTNet Workshop - Modeling Species Dispersal & Ecosystem Services, Princeton, April 2013.
“The Dynamics of Economic Epidemiology Equilibria” Association of Environmental and Resource Economists (AERE) annual meeting, Ashville NC, June 2012.
“Inserting a SEJ into a CGE” Second meeting of Ecological Forecasting Group from the University of Notre Dame, Chicago, October 2011.
“Evaluating the risk of EIDs emerging from global trade” EcoHealth Alliance, New York, March 2011.
“Modeling economic impacts of climate change and ocean acidification to fisheries” USEPA Climate Damages Workshop, January 2011.
“Great Lakes Ecosystem Services” seminar at University of Notre Dame, October 2010.
“The Dynamics of Optimally Delaying and Controlling a Spreading Invader” invited seminar, Colorado State University, September 2010.
“Spatial scale and the implementation and timing of uncertain environmental policy” World Congress of Environmental and Resource Economists, Montreal, June 2010.
“Evaluating the risk of EIDs emerging from global trade” invited seminar, Brown University, May 2010.

Benjamin Gilbert:

Papers
Refereed Journal Articles

Presentations
Oct. 2015: Colorado State University invited seminar
   "Overlapping Environmental and Financial Regulations: The Role of Corporate Governance"
   Resources for the Future, coauthor Jacob LaRiviere invited seminar
   "Incentives and Additionality in Energy Efficiency Subsidies"
Sept. 2015: Energy Policy Research Conference in Denver, CO
   "Social Image in the Residential Solar Market: Evidence from a Discrete Choice Experiment"
   "Overlapping Environmental and Financial Regulations: The Role of Corporate Governance"
July 2015: InterSolar North America (industry conference), invited panelist
   "Social Image in the Solar Home Market"
June 2015: UC San Diego Environmental Economics Group seminar
   "Social Image in the Residential Solar Market: Evidence from a Discrete Choice Experiment"
AERE Summer Conference in San Diego, CA
   "Incentives and Additionality in Energy Efficiency Subsidies"
Jan. 2015: ASSA Annual Meeting, Boston, MA
   "Overlapping Environmental and Financial Regulations: the Role of Corporate Governance"
Sept 2014: CU Boulder Environmental and Resource Economics Workshop
   "Pigouvian Taxes with Time-Varying Salience"
May 2014: Front Range Energy Camp, CU Boulder
   "Corporate Governance and Emissions"
“Pigouvian Taxes with Intermittent Billing and Habits”
July 2013: University of Tennessee Workshop on Causal Identification in Environmental and Energy Economics

“Dynamic Salience and Intermittent Price Signals”
June 2013: WEAI Annual Conference in Seattle, WA
“Organizational Apology and Compensation Demanded for Public Goods Damage”

“Evidence of Habit Formation in Residential Electricity Consumption”
May 2013: North American Association of Fisheries Economists Forum, St. Pete Beach, FL
“Organizational Apology and Compensation Demanded for Public Goods Damage”

“Perceived Occupational Mobility Among Artisanal Fishers”
“Conspicuous Consumption of Charismatic Species”
Front Range Energy Camp, CU Boulder

“The Four Horsemen of Household Electricity Demand: Insalient Prices, Habit Formation, Durable Goods, and Pollution”
Nov. 2012: Colorado School of Mines, invited seminar
“Dynamic Salience and Intermittent Price Signals”

June 2012: AERE Summer Conference in Asheville, NC and WEAI Annual Conference in San Francisco, CA
“Consumer Behavior with Intermittent Cost Signals: Evidence from Smart Meters”

Sept 2010: CU Boulder Environmental and Resource Economics Workshop
“What can existing smart meter data reveal about energy efficiency opportunities?”

July 2010: Biennial Conference, International Institute for Fisheries Economics and Trade (IIFET), Montpellier, France, July 2010
“Economic Efficiency and Sector Allocations in the New England Groundfish Fishery”
“Measuring Technological Change in Artisanal Fisheries: Evidence from Malaysia”

Sridhar Gogineni
Papers
Refereed Journal Articles


3. Gogineni, Sridhar and William Megginson, 2010. IPOs and Other Non-Traditional Fundraising Methods of Private Equity Firms. Published as chapter in Private Equity: Fund Types, Risks and Returns, and Regulation
Presentations

- Overlapping Environmental and Financial Regulations: The Role of Corporate Governance. Presented at: Financial Management Association annual meetings, Orlando, USA – October 2015; Association of Environmental and Resources Economists (AERE) summer conference, San Diego, USA – June 2015*; Allied Social Sciences Association (ASSA) annual meeting, Boston, USA – January 2015*

Robert W. Godby:
Papers

Refereed Journal Articles

Books

Presentations

"Contemplating the Crisis: Causes, Concerns and Possible Solutions," presented to Economics faculty, Pforzheim University, Pforzheim Germany, July 9, 2012.


Pawan Jain:
Papers

Refereed Journal Articles


Refereed Book Chapters


Presentations
- “Taxation and REIT market valuation” Securities and Exchange Board of India (SEBI), March 2015.
- “Systemic Microstructure Risks of High Speed Trading” National Stock Exchange of India (NSE), December 2014.
- “Powerful Subordinates: Internal Governance and Stock Market Liquidity” Clarkson University, January 2013.
- “Reduced Latency and Market Quality on the Tokyo Stock Exchange” Worcester Polytechnic Institute, November 2012.
- “Reduced Latency and Market Quality on the Tokyo Stock Exchange” University of Wisconsin, Whitewater, November 2012.
- “Reduced Latency and Market Quality on the Tokyo Stock Exchange” Fairfield University, November 2012.
- “Effective Online Teaching” Organized professional development workshop at the University of Memphis, Memphis, TN, October, 2011
- “Effective Online Teaching” Organized professional development workshop at LeMoyne Owen College, Memphis, TN, January, 2011
- “Technology in Teaching” Invited speaker at the Institute of Professional Studies (IPS), India, October, 2008 and December, 2011

Thorsten Janus:

Papers
Refereed Journal Articles

Presentations
“Economic Shocks, Civil War and Ethnicity,” presented at the LAC-DEV Conference, University of Massachusetts-Amherst, November 4-5, 2013
“Natural Resource Extraction and Civil Conflict,” presented at the World Congress of Environmental and Resource Economists, Université du Québec à Montréal, Montréal, Canada, June 28-July 2, 2010

Charles F. Mason
Papers
Refereed Journal Articles

Refereed Chapters in Books
**Presentations (2015 only)**


**Owen Phillips:**

**Papers**

Refereed Journal Articles


Presentations

Sherrill Shaffer:
Papers
Refereed Journal Articles


**Presentations**

- Royal University of Groningen (March 2013): “Moral Hazard, Reciprocal Brokered Deposits, and Bank Risk.”
- University of Otago (New Zealand), April, 2012: “Assessing Competition with the Rosse-Panzar Model: The Role of Scale, Costs, and Equilibrium,” coauthored with Jacob A. Bikker and Laura Spierdijk.

**Jason Shogren:**

**Papers**

**Refereed Journal Articles**


Books


Refereed Chapters in Books


**Presentations (2015 only)**
College seminar, Texas A&M University (Feb 2015)
Keynote, Centre for European Economic Research (ZEW), Mannheim, Germany, Workshop on Behavioral and Environmental Economics (March, 2015)
Department seminar, University of Alaska- Anchorage (March 2015)
Talk for Global Issues Workshop on Climate Change, U of Wyoming Law School (Spring 2015)
Keynote, Canadian Economic Association meetings, Toronto (May 2015)
Keynote, PBL, The Hague, Netherlands (July 2015)
Bioeconomics Workshop, University of Tennessee (July 2015)
Keynote, Asian Association of Environmental and Resource Economics, Taipei, Taiwan (August 2015)
Seminar, Colorado State University (October 2015)
Lectures, Vanderbilt Law School (October 2015)
Seminar, Workshop in honor of J Van Huyck, Southern Methodist University (October 2015)
Climate change economics, Public Lecture, Santiago, Chile (November 2015)
Public lecture, Puerto de Ideas, Valparaiso, Chile (November 2015)
Diplôme Docteur honoris causa, Université d’Aix-Marseille, France (November 2015)
Lecture, Workshop in honor of Jason Shogren, GREQEM, Marseille, France (November 2015)

**Alexandre Skiba**

**Papers**

Refereed Journal Articles


Refereed Book Chapters

Presentations
Indiana University (Fall 2013)
University of Colorado (Spring 2012)
Washburn University (Spring 2012)
Empirical Investigations in International Trade (University of Oregon, 2014, discussant)
Advances in International Trade workshop (Georgia Tech, 2014)
Southern Economic Association conference (Atlanta, 2014)
Financial Management Association Conference (Nashville, 2014)
Midwest International Economics Meetings (The University of Kansas, 2014)
Midwest International Economics Meetings (IUPUI, 2014)
West Coast Trade Workshop at the University of California in Santa Cruz (Spring 2012)
Empirical Investigations in International Trade (Purdue University, Fall 2011)
Southern Economic Association conference (Washington D.C., 2011)
Empirical Investigations in Trade and Investment (Keio University, Tokyo, Japan, 2011, discussant)
Southern Economic Association conference, (Atlanta, 2010)

Frederic P. Sterbenz:
Papers
Refereed Journal Articles
1. David Aadland and Frederic Sterbenz The Economics of Emergency Meetings” Economic Inquiry. vol. 53, no. 2 April 2015 pp. 1019-1037.

Klaas T. van ‘t Veld:
Papers
Refereed Journal Articles

Refereed Book Chapters

**Presentations**
Overlapping Environmental and Financial Regulations: the Role of Corporate Governance, AERE 4th Annual Summer Conference, San Diego, CA, June 3-5, 2015
Ego-Depletion, Habit Formation, and Attention, Workshop on Consumer Behavior, Self-control, and Intrinsic Motivation, University of Copenhagen, Denmark, December 8, 2014
Eco-label Competition and Gradation, AERE 3rd Annual Summer Conference, Banff, Alberta, Canada, June 6-8, 2013
Give me austerity and fiscal responsibility, but not yet, Saturday University, University of Wyoming, Sheridan, Wyoming, February 9, 2013
Give me austerity and fiscal responsibility, but not yet, Saturday University, University of Wyoming, Jackson, Wyoming, March 3, 2012
Give me austerity and fiscal responsibility, but not yet, The Economics of Combining CO2-EOR with Storage IEA-OPEC CO2-EOR Kuwait Workshop, Kuwait City, Kuwait, February 7-8, 2012.

vi. National/international awards (2010-2015)

**Albers:**
Dean’s Award for International Programs. Oregon State University College of Forestry. 2013.
Banerjee:

Barbier:
Listed on ideas.repec.org among top 5% of economists worldwide (#528) based on research publications as of 2015


2015 Association of Environmental and Resource Economists (AERE) Fellow (Awarded June 11, 2016)

2015 Recipient of the 13th Annual Patrick Lecture Series Award, Graduate School and Coastal Studies Institute, Louisiana State University, Baton Rouge, Louisiana

2015 STEPI Fellowship, Science and Technology Policy Institute, Seoul, Republic of Korea.

2013-14 Recipient of the University of Wyoming, College of Business Outstanding Senior Research Award.

2013 Three peer-reviewed journal articles with Professor Barbier as the lead author were selected in an international survey of marine scientists as the top five most influential articles of all time on marine ecosystem services. The articles were first, fourth and fifth respectively on the list. The survey was conducted by the Marine Ecosystem Services Partnership of Duke University, USA. See [http://openchannels.org/literature-library/top-mes](http://openchannels.org/literature-library/top-mes).

2013 Award Recipient, Fall 2013 Faculty Senate Speaker Series, University of Wyoming

2012-2013 Recipient of the University of Wyoming, College of Business Advisory Board (COBAB) Faculty Award in the Department of Economics & Finance.

2010-11 Recipient of the University of Wyoming, College of Business Outstanding Senior Research Award.

Choi:
Best Paper Award for “Portfolio concentration and performance of institutional investors worldwide”, Asian Financial Management Association, 2015

Young Scholar Award, Korea America Finance Association, 2014

Crocker Young Scholar Award for “Information Acquisition, International Under-diversification and Portfolio Performance of Institutional Investors,” University of Wyoming, 2012


**Finnoff:**


2014, 2015 College of Business Advisory Board (COBAB) Faculty Award. The award recognizes the best all round faculty member for the academic year in teaching, research, and service.

2014 John P. “Jack” Ellbogen Meritorious Classroom Teaching Award.


University of Wyoming Outstanding Advisor Award, Mortar Board Honor Society, 2011-2012. Invited to speak at the College of Business Showcase, October 2011.

College of Business Outstanding Senior Teaching Award, University of Wyoming 2010-2011. Named a “Top Prof” for the 2010 - 2011 academic year by University of Wyoming Cap and Gown Chapter of Mortar Board.

**Gilbert:**

2015 UW College of Business Junior Faculty Teaching Award

2015 Tom & Judy Crocker Junior Faculty Research Award

2015 Best Practitioner Paper Award, American Real Estate Society (ARES) conference for “On the relation of local amenities and house price dynamics” with Eli Beracha, Tyler Kjorstad, and Kiplan Womack

2014 (Nominated) UW College of Business Junior Faculty Research Award

2013 (Nominated) UW College of Business Junior Faculty Teaching Award

2010 Clive Granger Research Prize, UCSD Environmental Economics Group

**Godby:**

Nielsen Research Fellowship, School of Energy Resources, November 2015.

University of Wyoming, College of Arts and Science Thumbs-Up Award for contributions to the University, November 2015.

Nominated, Promoting Intellectual Engagement in the First Year (PIE) Award, University of Wyoming, 2015.

National Society of Collegiate Scholars, appointed Distinguished Member, October 2014.
Nominated, Promoting Intellectual Engagement in the First Year (PIE) Award, University of Wyoming, 2014.
Nominated, Outstanding Service Award, - College of Business, University of Wyoming, 2014.
Outstanding Service Award, - College of Business, University of Wyoming, 2011.
Top Professor Award, UW Cap and Gown Chapter of Mortar Board, November 2010

**Jain:**
2015 National Association of Real Estate Investment Trust (NAREIT) and the American Real Estate and Urban Economics Association (AREUEA) Real Estate Research Conference Distinguished Research Prize (June 8, 2015).
Semifinalist for the best paper award in the Institutions and Markets category, Financial Management Association (FMA) (October 17, 2014).

**Janus:**
University of Wyoming Center for Global Studies Wallop Conversations on Democracy Award, Spring 2016 (project title: “Economic Shocks and Political Transitions”)

**Shaffer:**
Listed on ideas.repec.org among top 5% of economists worldwide based on research publications as of 2015

**Shogren:**
Listed on ideas.repec.org among top 5% of economists worldwide (#298) based on research publications as of 2015
Royal Swedish Academy of Sciences, Member, (since 2008)
Université d’Aix-Marseille, France, Diplôme Docteur honoris causa, 2015
Association of Environmental and Resource Economists, Fellow, 2014
Beijer Institute of Ecological Economics, Royal Swedish Academy of Sciences, Fellow, 2010, Board Member, 2015-
Environmental and Resource Economics (EAERE), Best Paper ERE 2011
Environmental and Resource Economics (EAERE), World Congress Best Poster 2014

**Skiba:**
2015 - Outstanding Junior Teaching Award
2014 – Tom and Judy Crocker Junior Faculty Research Award
2012 - Sparky Turner “Raise the Bar” University of Wyoming College of Business Service Award
2011 - Award for Promoting Intellectual Engagement in the First Year, a university wide student nominated award

van ‘t Veld:
Promoting Intellectual Engagement (PIE) Teaching Award, University of Wyoming, 2012
Mortar Board Top Prof Award, University of Wyoming, 2010

c. Program reputation
The University of Wyoming’s Department of Economics and Finance continues to be ranked among the world’s top programs in environmental economics, according to IDEAS, a prestigious worldwide organization that disseminates economics research. IDEAS is a service hosted by the Research Division of the Federal Reserve Bank of St. Louis. In its “Top 10% Institutions and Economists in the Field of Environmental Economics,” IDEAS ranked the UW Department of Economics and Finance 11th. The list includes all academic and non-academic research institutions globally. Among universities only, UW is ranked eighth in the world. Read More

d. Curriculum
The Master's with a Dual Major in Economics and Finance requires 39 credits to be completed: 33 credits of coursework and a master's thesis, which completes the final 6 credits for the degree.

Students will start their course of study with two courses in economic theory (ECON 5020 and ECON 5330), as well as Applied Econometrics (ECON 5340). The students will then complete courses in Empirical Finance (FIN 5400), Investment Management (FIN 5310), Finance Theory (FIN 5520) and Macro Analysis I (ECON 5010). Students will also take a two semester series of Financial Economics (ECON 5640 and ECON 5650) and a course in Corporate Governance (FIN 5320). The students are also offered a variety of electives to fulfill their 39 credits.

Sample Program - Dual MS in Economics and Finance

\textbf{Year 1}
ECON 5020 Microeconomic Analysis I
ECON 5330 Mathematical Economics
ECON 5340 Applied Econometrics
ECON 5400 Empirical Finance
FIN 5310 Investment Management
FIN 5320 Corporate Governance

\textbf{Year 2}
ECON 5010 Macroeconomic Analysis I
ECON 5640 Financial Economics I
ECON 5650 Financial Economics II
FIN 5520 Financial Theory Seminar
Grad Elective
The master's student will select a major professor for direction with master's thesis. A committee, selected by the student and his or her major professor, conducts an oral examination of the thesis and areas studied in the program. A favorable report from the committee completes the degree requirements.

e. Distance delivery
This program is not offered online or off-campus.

f. Quality of Assessment Plan/data
The program is reviewed each year by the Graduate Coordinator and Department Chair, based on student assessments, enrolments and graduation rates and other assessment plan criteria. Recommendations for changes in curriculum, courses and assessments are then voted and decided on by Faculty.

The program is accredited through the college accreditation with the Association to Advance Collegiate Schools of Business (AACSB), and we are currently completing and documenting program assessment plan and outcomes for the next review of the College of Business accreditation in September 2016.

3. Mission Centrality

a. Support for UW’s mission, vision and strategic goals: The University of Wyoming offers more than 90 graduate degrees, providing the variety of subjects, the rigor of high quality education, and the depth of research that is associated with a top-tier land grant university. The University of Wyoming is one of the nation's research universities with a growing portfolio of research and scholarly activity in a variety of disciplines. Through steady increases in research infrastructure constituting nationally recognized research facilities and in highly productive faculty members, UW has a strong presence in academic research. The University of Wyoming strengthens communities by training students in professions critical to the state and region. Arguably most critical for Wyoming is professional training in health care, education, business, and law.

The MS in Economics supports this mission, vision and goals in several ways:

Our program has a long-standing reputation in applied microeconomics, particularly in the areas of environmental and natural resource economics, industrial organization, trade and development economics, and financial economics.

Our program is small by design, allowing students the opportunity to work closely with highly respected faculty. We emphasize that all students develop a solid foundation in quantitative
methods and economic theory. This foundation is then built upon as students work with faculty to investigate challenging economic and financial issues that matter locally and around the globe. During the research process, we stress critical thinking and clear communication of the relevant issues.

The MS in Economics is flexible and offers several options. No area of concentration is required for the economics master's degree. This allows the student to select courses in a variety of fields for a broad exposure to contemporary economic problems. One may also limit course selections to one or two fields and acquire a high degree of competence in a limited number of areas.

We pride ourselves on our graduate placement record and dedication to mentoring students as they mature into professional economists, financial analysts, and future business leaders, many of whom work in Wyoming and neighboring states.

b. Contributions to programs across campus: The graduate programs of the Department of Economics & Finance, which include the MS in Economics, produces among the highest amount of total credit hours across all programs at the University of Wyoming. From AY 2009-10 to AY 2013-14, the graduate programs of the Department of Economics & Finance averaged 960.6 credit hours per academic year.³

In addition, the MS in Economics can be combined with a number of graduate minor options from programs across the university. These options are:

- **Applied Economics**, College of Agriculture and Natural Resources
- **American Indian Studies**, College of Arts and Sciences
- **Computational Science**, Interdisciplinary
- **Environment and Natural Resources**, Haub School of Environment and Natural Resources
- **Gender and Women's Studies**, College of Arts and Sciences
- **International Studies**, College of Arts and Sciences
- **Qualitative Research Methods**, College of Education
- **Quantitative Research Methods**, College of Education
- **Queer Studies**, College of Arts and Sciences
- **Statistics**, College of Arts and Sciences

c. Placement

We pride ourselves on our graduate placement record and dedication to mentoring students as they mature into professional economists, financial analysts, and future business leaders, many of whom work in Wyoming and neighboring states (See [http://www.uwyo.edu/econfin/about-us/alumni/mastersineconomicsalumni.html](http://www.uwyo.edu/econfin/about-us/alumni/mastersineconomicsalumni.html)). In addition, many of our students

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who enroll in the foundation year of our MS in Economics (see Section 2.d. above) qualified in their 2nd year for the PhD in Economics and chose this degree option over obtaining a MS in Economics. For these students, placement in the PhD in Economics is the outcome of their enrolment in the foundation year of the MS in Economics. Some of our graduates also undertake PhD programs at other universities.

The following lists the placement of 6 of our 8 graduates from AY2009-10 to AY2014-15:

- Jeremiah Weichman (2010) - Senior Project Manager Finance, Union Pacific Railroad, Omaha, NE
- Joshua Hyde (2012) - Financial Analyst, BP, Houston, TX
- Eric Becker (2013) - Financial and Accounting Analyst, Union Pacific Railroad, Omaha, NE
- Daniel DeMillard (2013) - Sr. Business and Technology Analyst, Kilowatt Financial
- Tom Creighton (2014) - Union Pacific Railroad, Omaha, NE
- Katherine Cusack (2014) - Union Pacific Railroad, Omaha, NE

d. Uniqueness of the program: The MS in Economics is not duplicated by any other graduate program offered at the University of Wyoming.

4. Cost
   a. Ratio of student credit hours per FTE: 960.6/18 = 53.4 credit hours/FTE (AY2009-10 to AY2013-14)\(^4\)

   b. Direct instructional expenditures
      i. Per student credit hour: $3,581,957.8/960.6 = $3,729\(^5\)
      ii. Per total degrees awarded: $3,581,957.8/8 = $447,744.7\(^6\)
      iii. Non-personnel expenditures per total academic FTE: $208,153.0/18 = $11,564.1\(^7\)

\(^4\) Credit hours from “UW – Program Review: Economics & Finance”, Excel Spreadsheet, Office of Institutional Analysis, 7/19/2016 and 14 FTE for tenured and tenure-track faculty teaching the Masters in Economics (see 2.b.).

\(^5\) Credit hours from “UW – Program Review: Economics & Finance”, Excel Spreadsheet, Office of Institutional Analysis, 7/19/2016. Instruction unit expenditures are from “2014 National Study of Instructional Costs and Productivity (Delaware Cost Study) – University of Wyoming: Economics and Finance”, 7/25/2016. Note this cost includes the cost of graduate and undergraduate programs and so is inflated for graduate only.

\(^6\) Number of graduates from “Degrees – dup Master” Excel Spreadsheet, Academic Affairs, 6/21/2016. Instruction unit expenditures are from “2014 National Study of Instructional Costs and Productivity (Delaware Cost Study) – University of Wyoming: Economics and Finance”, 7/25/2016. Note this cost includes the cost of graduate and undergraduate programs and so is inflated for graduate only.

\(^7\) Non-personnel expenditures are from “2014 National Study of Instructional Costs and Productivity (Delaware Cost Study) – University of Wyoming: Economics and Finance”, 7/25/2016 and 18 FTE for tenured and tenure-track
c. Course enrollment
i. Number of classes falling under University minimums: For all graduate programs, including the MS in Economics, offered by the Department of Economics and Finance, the number of group instruction classes falling below university minimums were

<table>
<thead>
<tr>
<th>AY</th>
<th>Classes</th>
</tr>
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<tbody>
<tr>
<td>2009-10</td>
<td>8</td>
</tr>
<tr>
<td>2010-11</td>
<td>2</td>
</tr>
<tr>
<td>2011-12</td>
<td>1</td>
</tr>
<tr>
<td>2012-13</td>
<td>1</td>
</tr>
<tr>
<td>2013-14</td>
<td>4</td>
</tr>
</tbody>
</table>

ii. Lower-division courses falling under University minimums: N/A

d. Other instructional cost drivers
i. Section fill rates: N/A, as all courses were taught as single sections.

ii. Course completion rates: No data are currently available for AY2010-11 to AY2014-15.

iii. Curricular complexity: The MS in Economics & Finance is flexible and offers several options. No area of concentration is required for the economics master's degree. This allows the student to select courses in a variety of fields for a broad exposure to contemporary economic problems. One may also limit course selections to one or two fields and acquire a high degree of competence in a limited number of areas. In addition, many of our students who enroll in the foundation year of our MS in Economics (see 2.d. above) have the option of choosing to qualify in their 2nd year for the PhD in Economics.

iv. Faculty course load: Over AY2009-10 to AY2014-15, the standard course load for tenured and tenure-track faculty is 4 courses per year (2:2 course load). The exception is for endowed professors (2:1 or 1:1, depending on research expectations), Department Chair (one-course reduction) and Undergraduate or Graduate Coordinators (one-course reduction each).

e. Research expenditures per tenured and tenure-track FTE: $941,787/18 = $52,321.59

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faculty teaching the Masters in Economics (see 2.b.). Note this cost includes the cost of graduate and undergraduate programs and so is inflated for graduate only.

9 Research expenditures are from “2014 National Study of Instructional Costs and Productivity (Delaware Cost Study) – University of Wyoming: Economics and Finance”, 7/25/2016 and 18 FTE for tenured and tenure-track faculty teaching the Masters in Economics (see 2.b.).
f. Comparison to national benchmarks (Delaware data):\(^{10}\)
Total student credit hours, graduate (AY 2013-14): 832
Total tenured and tenure-track faculty FTE (Fall 2013): 18
Total direct expenditures for instruction (AY 2013-14): $3,581,957.8
Non-personnel expenditures (AY 2013-14): $208,153.0
Research expenditures (AY 2013-14): $941,787.1
Ratio of student credit hours per tenured and tenured track FTE: 832/18 = 46.2
Direct expenditure for instruction/per graduate student credit hour: $3,581,957.8/832 = $4,305.2
Direct expenditure for instruction/per degrees awarded: $3,581,957.8/8 = $447,744.7
Research expenditures per tenured and tenured track FTE: $941,787.1/18 = $52,321.5

Part II – Recommendations

2) Retain with Further Review Required

The MS in Economics & Finance is a unique graduate program that combines the key course elements of two other programs, the MS in Economics and the MS in Finance. The program is designed for students who wish to have a more quantitative background suitable for research, including study at the PhD level or analysis as a financial market researcher. The program includes heavy emphasis in the areas of research and quantitative methodologies not usually emphasized at the master’s level. The dual major will prepare a student for research or future graduate studies at the PhD level in both economics and finance.

In addition, elimination of the MS in Economics & Finance would not save costs, as it draws on the same course curriculum as for the MS in Economics and the MS in Finance. Moreover, because the MS in Economics & Finance and the PhD in Economics share the same foundation year of courses (Year 1, as outline in Section I.2.d. above), these course would still have to be taught as part of the PhD in Economics. Similarly, the graduate elective courses in Year 2 of the MS in Economics & Finance are courses offered in the PhD in Economics, or courses taught as part of the MBA degree of the College of Business.

The graduate programs of the Department of Economics & Finance, which include the MS in Economics & Finance, produces among the highest amount of total credit hours (ca. 1,000 credit hours per year) across all programs at the University of Wyoming. The MS in Economics & Finance is not duplicated by any other graduate program offered at the University of Wyoming, while at the same time, students in the program are able to take graduate minor options in 10 different programs across campus (See Section I.3.b. above). In addition, the program has an excellent graduate placement record and has produced professional economists, financial analysts, and future business leaders, many of whom work in Wyoming and neighboring states.

The Department of Economics and Finance is currently completing and documenting program assessment plan and outcomes for the next review of college accreditation, as part of the general requirement for the entire college. In addition, the Department has undertaken a revision of its PhD in Economics program, which should lead to improvements in the foundation year and graduate elective courses, as well as in assessment procedures, which should also improve the performance and graduate rates of students undertaking the MS in Economics & Finance.

As documented in the Program Review of the MS in Finance, a comprehensive program review was conducted internally to develop a new MS Finance curriculum. The goals of the review were to (i) better align curriculum with regional demand, (ii) better align curriculum with faculty specialties, (iii) to reduce program cost, and (iv) develop new revenue opportunities. It is anticipated that these changes will increase demand not only for the MS in Finance but for the dual MS in Economics & Finance.