

XIAOYI (SHAWN) MU

Center for Energy, Petroleum and Mineral Law and Policy (CEPMLP)
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ACADEMIC POSITIONS

Reader in Energy Economics, Head of Energy Economics group & Director for MSc Programmes, CEPMLP, University of Dundee, 10/2016 — present

Key Administrative duties & accomplishment include: curriculum development and review; student recruitment and advising; workload management of energy economics group.

Developed a dual degree Master program on Energy Finance with China University of Petroleum Beijing

Organized several SIRE energy economics workshops

Led the organization of CEPMLP@40 seminar, 2nd Dundee Energy Forum, Wednesday visiting speaker series

Senior Lecturer in Energy Economics, Head of Energy Economics & Director for MSc Energy Studies, CEPMLP, University of Dundee, 10/2012 — 10/2016

Lecturer (Assistant Professor) in Energy Economics, CEPMLP, University of Dundee, 05/2008 — 09/2012

Visiting Professor, School of Economics, Renmin University of China (2010-present)

EDUCATION

Ph.D., Economics, University of Oklahoma, Norman, OK, 06/2006

B. A., Marketing and Trade Economics, Renmin (People's) University of China, Beijing, 7/1994

FIELDS OF INTEREST

Energy Economics, Industrial Organization

EMPLOYMENT HISTORY

- Senior Consultant (07/2006 – 07/2008), Global Energy Decisions (Now ABB Ventyx), Sacramento, CA
 - Engaged in power system simulation, integrated resource planning modelling, loss of load probability studies, valuation of thermal and hydro power plants, and econometric forecasts of ancillary services
 - Developed a bootstrapping tool for hourly wind generation patterns
- Market Operations Analyst (Intern, 07/2005-10/2005), Electric Reliability Council of Texas (ERCOT), Inc
 - Statistical modeling the deployment of ancillary services in ERCOT; analyzing bidding behavior in the balancing market

- Research Associate/Teaching Assistant at the Institute for Energy Economics and Policy, Sarkeys Energy Centre, (08/2001-05/2006), University of Oklahoma
 - Research associate for Dr. Dennis O'Brien, participated in projects “The Valuation of Gas-to-Liquids in Asia Pacific”, “The Energy and Weather Project” and “The Oklahoma Refining Study”
 - Teaching Principles of Microeconomics and Elements of Statistics
- Planning Manager (11/1999- 05/2001), Natural Gas and Pipelines, PetroChina Co. Ltd
 - Responsible for crude oil sales and logistics planning, statistics, and market and policy analysis
 - Participated in the restructuring of CNPC and IPO of PetroChina
- Market/Policy Analyst (07/1994 – 11/1999), Refining and Marketing, China National Petroleum Corporation (CNPC)
 - Engaged in marketing and sales management, statistical analysis of refined petroleum products market, demand forecast, strategic planning, and policy analysis

REFEREED PUBLICATIONS

1. “Towards an integrated spot LNG market: An interim assessment” (with Haichun Ye), *Energy Journal*, 2018, vol 39, No 1.
2. “Willingness-to-pay for climate change mitigation: Evidence from China” (with Yujie Li, Anita Schiller, and Baowei Zheng), *Energy Journal*, 2016, vol 37, SI1, 179-194.
3. “The distortionary effect of petroleum production sharing contract: A theoretical assessment” (with F. Farimani and A. Taherifard), *Operations Research Proceedings 2015*
4. “Who benefit from fuel subsidies? A case study of Nigeria” (with Ismail Soile), *Energy Policy*, 2015, vol 87, pp. 314-324
5. “Small Trend and Big Cycles in Crude Oil Prices” (with Haichun Ye), *Energy Journal*, 2015, Vol 36, No. 1, pp. 27-50
6. “Current Account Adjustments in Developing Countries: The Role of Exchange Rate Regimes” (with Haichun Ye), *Economic Inquiry*, Vol 51, No. 2, Apr 2013, pp.1566-81
7. “The safety regulation of Small-scale Coal Mines in China: Analyzing the Interests and Influences of Stakeholders” (with Xiaoqian Song), *Energy Policy*, 52 (2013) 472-481
8. “Understanding the Crude Oil Price: How Important is the China Factor?” (with Haichun Ye), *The Energy Journal*, 2011, Vol 32, No. 4, pp. 69-92
9. “Investment Spikes and Uncertainty in the Petroleum Refining Industry” (with Timothy Dunne), *Journal of Industrial Economics*, Mar 2010, Vol 58, No.1, pp. 190-213
10. “Weather, Storage, and Natural Gas Price Dynamics: Fundamentals and Volatility”, *Energy Economics*, Jan 2007, Vol 29, Iss. 1, pp. 46-63
11. “Local Option Sales Tax: A Decentralizing Policy?” (with Cynthia Rogers), *Proceedings: Ninety-Seventh Annual Conference on Taxation, 2004* (National Tax Association, collective volume), pp.72-79

WORKING PAPERS

12. “Asymmetric Volatility in Commodity Markets” (with Yu-fu Chen), prepare for submission

13. "Have the Chinese National Oil Companies Paid Too Much in Overseas Asset Acquisition?"
14. "Modelling the optimal production rate of international petroleum projects under PSC: the effect of rate sensitivity" (with Fazel Moridifariman, in-progress)
15. "Should an oil producing country go downstream?" (with Samiha Khayyat, in-progress)
16. "Petroleum refineries in the GCC countries: How well do they fare?" (in-progress)

BOOK

"*The Economics of Oil and Gas*", under contract, Agenda Publishing.

OTHER PUBLICATIONS

1. "China Oil Demand and the Gulf: Feeding the Dragon" Gulf Oil Review, Vol 1, Iss 4
2. Book review, "Powering China: Reforming the electric power industry in China" by Xu Yichong, *Journal of Asian Business*, 19 (2), 2003
3. "Petroleum Products Marketing in China" edited by Tian Jinghui, 2007, China Financial and Economic Publishing House, Beijing (book chapter in Chinese)
4. "Restructuring China's Petroleum Industry", edited by Lv Jianzhong, 1998, The Petroleum Industry Publishing House, Beijing (book chapter in Chinese)

TEACHING EXPERIENCE

- University of Dundee (2008-present, postgraduate courses)
 - Petroleum Economics and Policy
 - Economics of Regulation and Restructuring of Energy Industries
 - Economics for Business Managers
- Renmin University of China (Summer School, 2010-present)
 - Public Pricing and Regulation
- University of Oklahoma (2004-2005, undergraduate courses)
 - Principles of Microeconomics
 - Elements of Statistics
- Executives Training Courses
 - Petroleum Economics Training for PetroChina (May 2010)
 - Natural Gas Monetization Training for Shell (November 2008)
 - Electricity Load Forecasting, Price Modeling and Risk Management for Korean Power Exchange (June 2007)

GRANTS

- Co-investigator (13% of time for three years), DFID/ESRC Grant (£931,000) "China National Oil Companies and the economic development of Africa oil producers" start from 2015

- Carnegie Trust Research Grant (£2200), “A stakeholder analysis of safety regulation of China’s small coal mines”, 2011
- Carnegie Trust Research Grant (£2250), “The restructuring of China’s national oil companies”, 2009

STUDENTS SUPERVISION AND EXAMINATION

PhD Students

- Dilip Jena, on-going, topic: Essays on Capacity Mechanism in Electricity Markets
- Hanchen Xiao, on-gong, topic: The Integration of Wind Generation in UK Electricity Market
- Fazel Moridifariman, successfully completed
- Ismail Soile, successfully completed
- Samiha Khayyat, successfully completed
- Tetsuo Morikawa, successfully completed
- Sam Mitra, part-time, successfully completed
- Andon Blake, successfully completed

MSc Students

Every year I supervise 15-20 MSc students.

External Examiner

External examiner for Energy Management programme at Robert Gordon University

External examiner for PhD viva (candidate: Ahmed Adamu), Newcastle University

External examiner for PhD viva (candidate: Theophilus Acheampong), University of Aberdeen

External examiner for MPhil (candidate: Marwan Alssadek), Strathclyde University

HOSTED VISITORS (>3 months)

Dr Deng Yusong, Development Research Centre of the State Council, China (Chevening Fellowship, Award to the University £4800)

Dr Lv Jianzhong, CNPC Economic and Technology Research Institute, (Chevening Fellowship, Award to the University £4800)

Dr Song, Xiaoqian, Shanghai Jiaotong University

REFEREE EXPERIENCE

Referee for ESRC, Research Grants Council (RGC) of Hong Kong, Imperial College of London Press, Oxford University Press

Referee for *Energy Journal*, *Energy Economics*, *Energy Policy*, *International Journal of Energy Sector Management*, *Applied Energy*, *Journal of Environmental Economics and Management*.

PROFESSIONAL DEVELOPMENT

Completed the Learning, Teaching and Assessment module at the University of Dundee and obtained the Postgraduate Certificate in Teaching in Higher Education.

PRESENTATIONS

- IAEE North American Conference, 2017
- Department of Finance seminar, Durham University, 2017
- SIRE Energy Economics workshop, several times
- Department of Economics seminar, University of Aberdeen, 2013, 2015
- The IAEE session of ASSA Annual Conference, January 2012, Chicago
- Center for Energy, Petroleum and Mineral Law and Policy seminar, multiple times
- 29th IAEE North American Conference, October 2010, Calgary
- Department of Economics Seminar, University of Stirling, September 2010
- The SIRE Energy and Environmental Economics Workshop, March 2009 & February 2012
- Department of Economics Studies Seminar, University of Dundee, November 2008, Dundee
- 25th IAEE North American Conference, September 2005, Denver
- The IAEE session of ASSA Annual Conference, January 2005, Philadelphia
- 97th National Tax Association Conference, November 2004, Minneapolis
- Department of Economics Seminar, University of Oklahoma, April 2004, Norman

MEDIA AND PUBLIC ENGAGEMENT

- Interviewed by InterFax several times
- Interviewed by Financial Times on oil prices, 2015
- Interviewed by Thomas Reuters on the cost of producing clean fuel in China
- Invited to speak at FLAME conference in Amsterdam, the largest industry conference on natural gas in Europe, 04/2012
- Invited to speak at LNG Global Congress conference in London, 06/2012
- Interviewed by *The Courier* on the rising cost of fuel

AWARDS AND HONORS

- 25th IAEE North American Conference Student Best Paper Award (first place), Denver, 2005
- 28th IAEE International Conference Student Best Paper Award (first place), Taipei, 2005
- Robert C. Thomas Tenneco Energy Scholarship, 2001-2003
- Petroad Research Grant, 2002-2003

REFERENCES

Available upon request

OTHERS

Chinese citizen, UK permanent resident

Affiliations: American Economic Association, International Association for Energy Economics (IAEE)