The Economic Impact of Unconventional Shale Gas Development

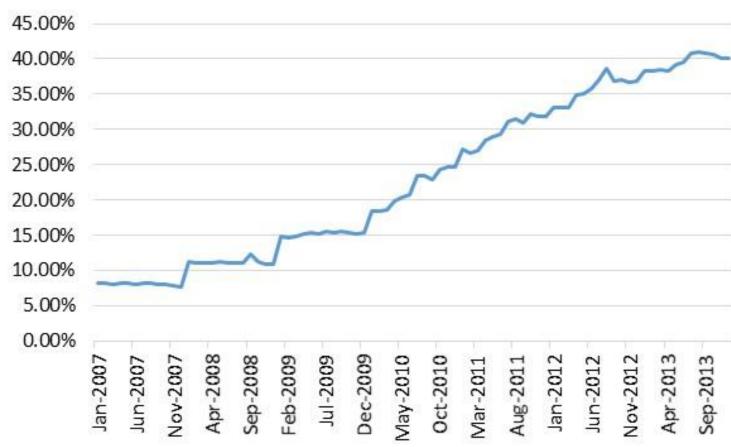
Dr. Yongsheng Wang

Associate Professor of Economics
Director of Financial Economics
Department of Economics and Business

Research Fellow
Center for Energy Policy and Management

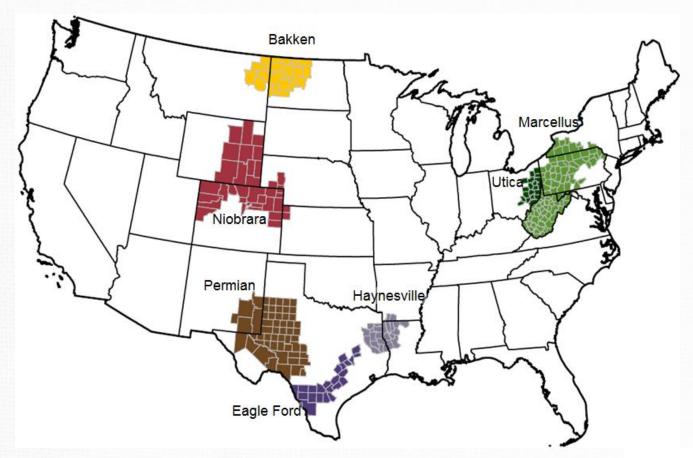


Percentage of Shale Gas Supply Nationally





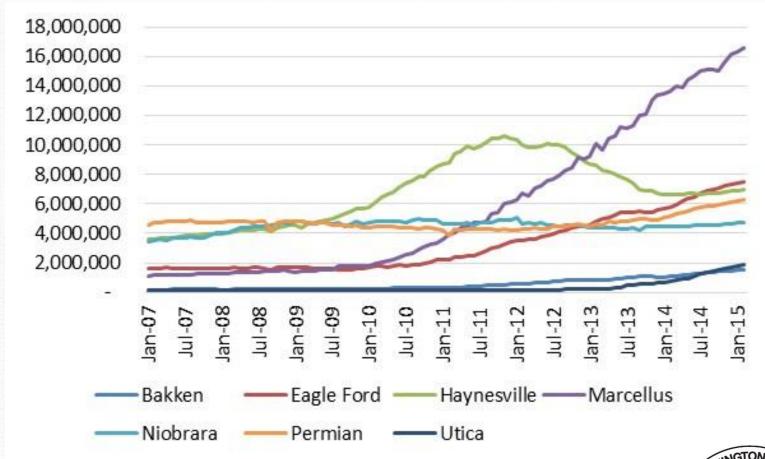
Shale Energy Supply Nationally



Note: the above shale plays accounted for 95% oil growth in the U.S. from 2011 to 2013 and 100% natural gas growth.



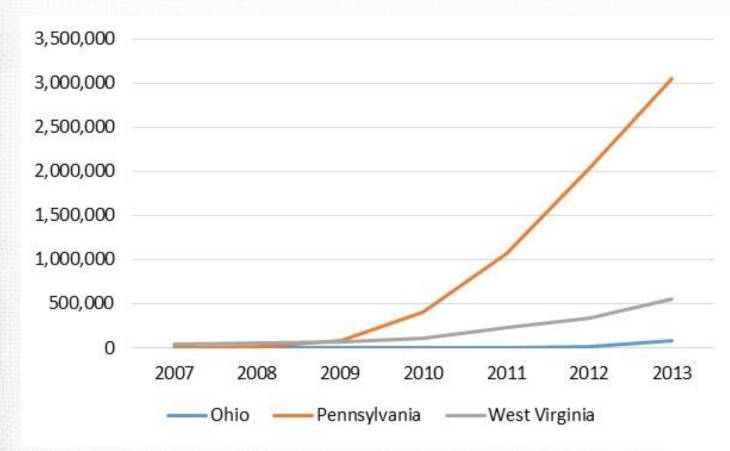
Productivity By Shale Plays



Note: Mcf/day; production from Marcellus accounts for more than 18% of national natural gas supply.



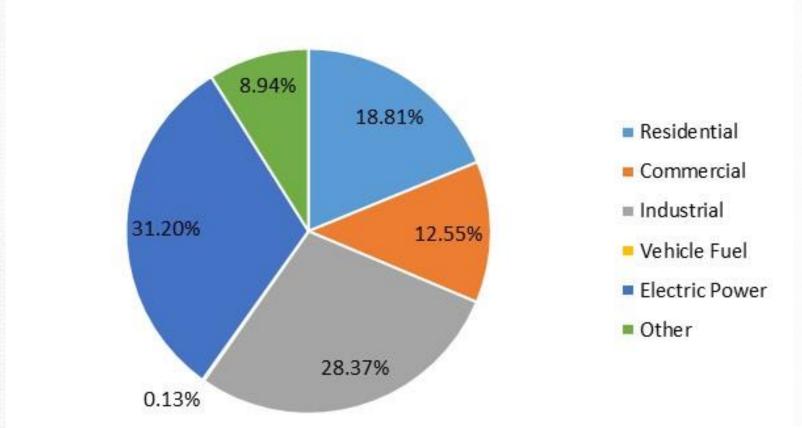
Shale Gas Production in Major Marcellus States



Note: Mcf. Source: EIA



U.S. Natural Gas Consumption by Category

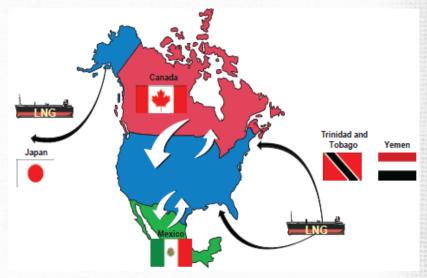


Source: EIA; data in 2013



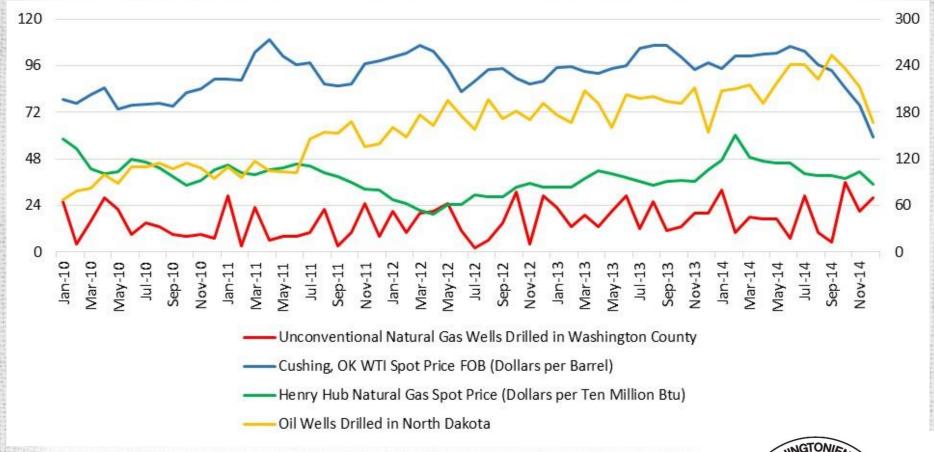
Opportunities and Challenges

- Impact from the Recent Oil Price Decline
- Pipeline Capacity
- LNG Export
- Risk Management
- The Future Energy Portfolio





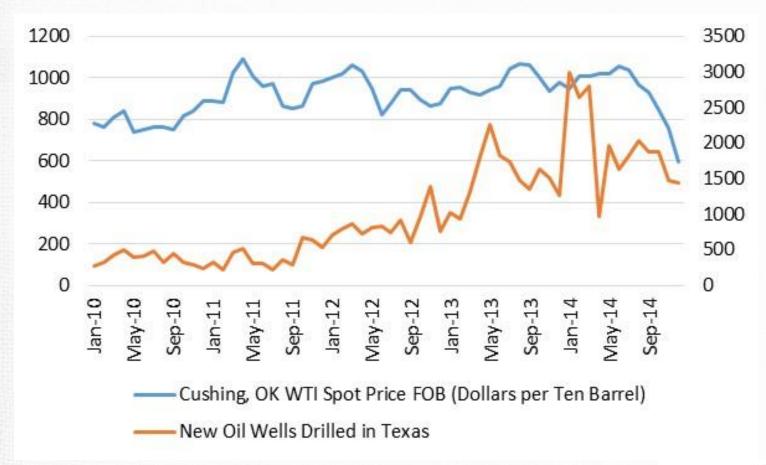
Wells Drilled and Oil and Gas Prices



Source: EIA and Department of Mineral Resources, North Dakota



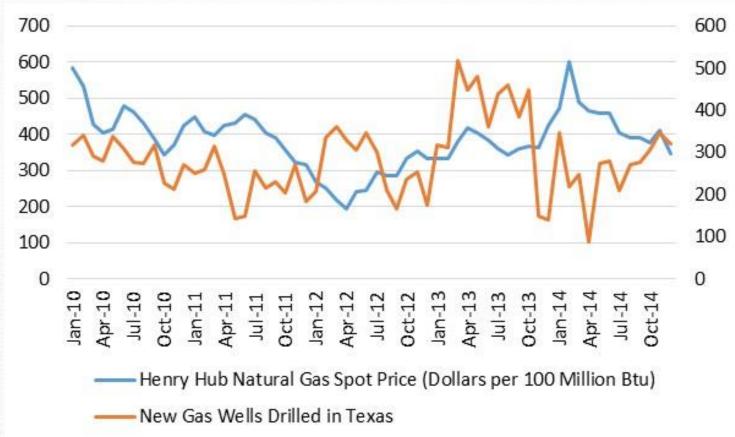
Wells Drilled and Oil and Gas Prices



Source: EIA and the Railroad Commission of Texas



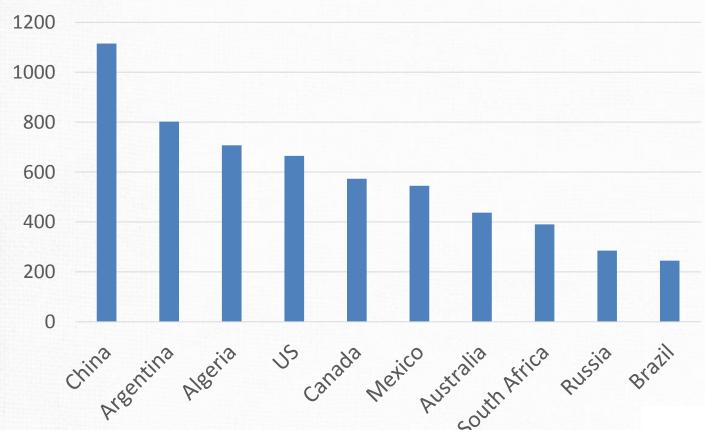
Wells Drilled and Oil and Gas Prices



Source: EIA and the Railroad Commission of Texas

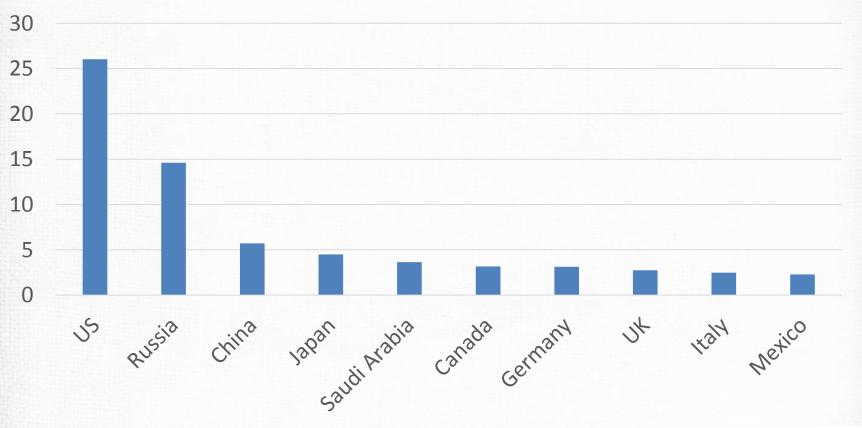


Recoverable Shale Gas Resources Ranking By Country (TCF)



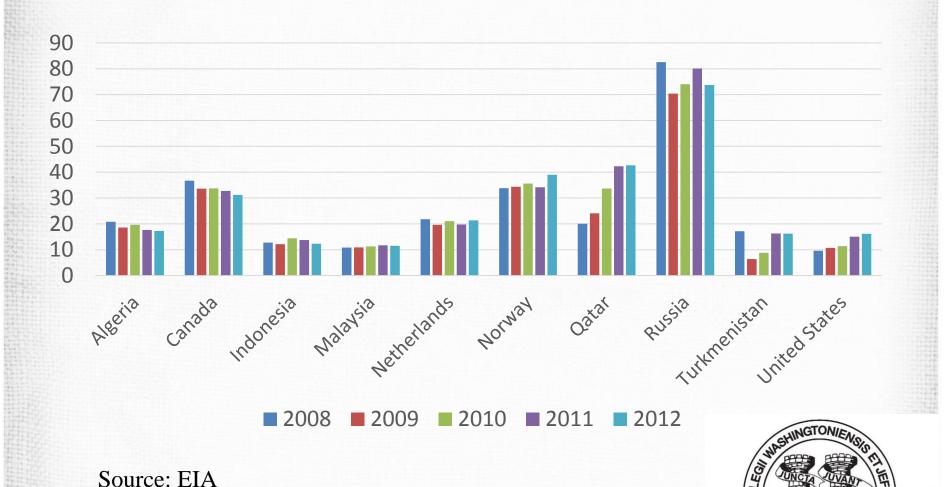


Top Ten Countries of Natural Gas Consumption (TCF)





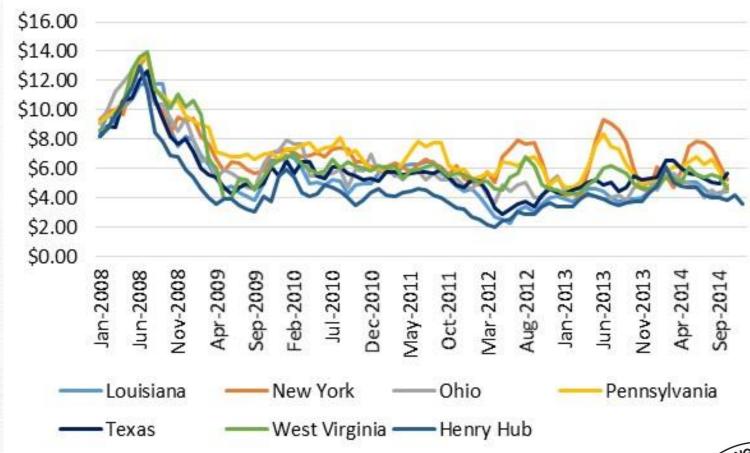
Natural Gas Export By Country (TCF)



BE A PRESIDENT

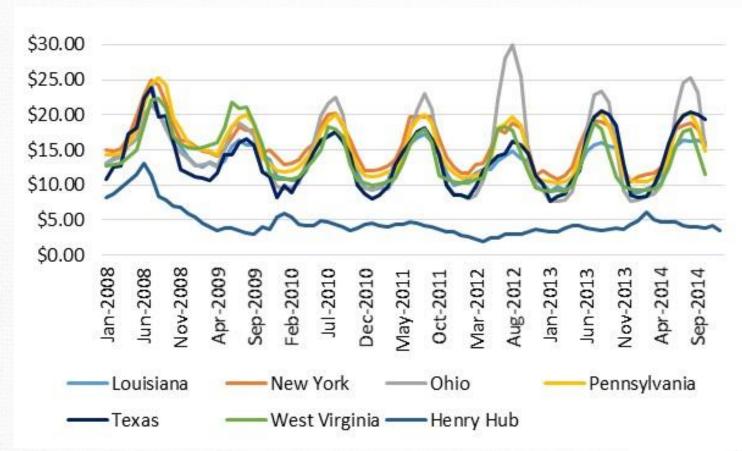
WASHINGTON & JEFFERSON COLLEGE

Natural Gas Prices (City Gate)



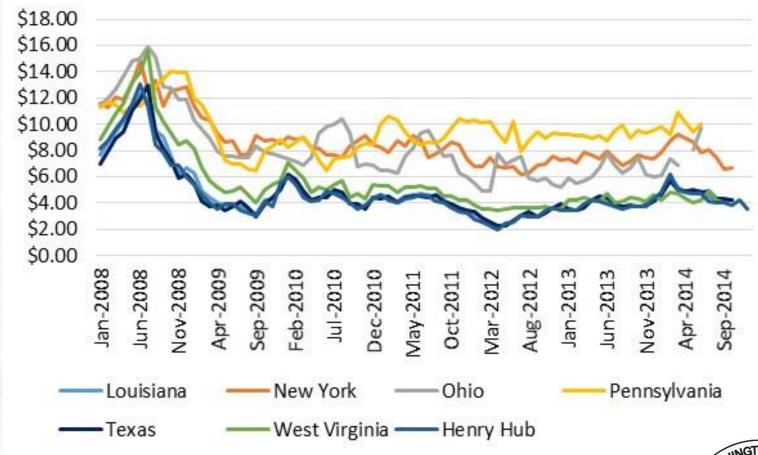


Natural Gas Prices (Residential)





Natural Gas Prices (Industrial)





Natural Gas Prices (Electric Power)

