

Thomas Tunstall

Senior research director with 20 years of experience in both the public and private sectors. Principal investigator for Eagle Ford Shale Economic Impact Studies (May 2012, March 2013, September 2014 and forthcoming 2017), West Texas Energy Consortium Study (June 2014), Preliminary Report on Mexican Energy Reform (May 2015), and Governor's Office Study on Small Business in Texas (April 2016), as well as peer-reviewed articles (see below). San Antonio Business Journal Contributor (12 columns annually). Shale Magazine Advisory Board (6 articles for the magazine annually). Three Wall Street Journal op-eds published to-date. Strong proponent of the New American University model.

Testified before the U.S. House Committee on Foreign Affairs Subcommittee for the Western Hemisphere on the topic "Pursuing North American Energy Independence: Mexico's Energy Reforms" (July 2015). Presented at TAMEST (The Academy of Medicine, Engineering and Science of Texas - an organization comprised of National Academy of Science members and Nobel laureates in Texas) task force meeting (October 2016). Provided testimony on several occasions to the Texas Legislature including Senate Committee on Economic Development, House Energy Caucus, Senate Committee on Natural Resources, and the Eagle Ford Shale Legislative Caucus. Moderated 2015 San Antonio mayoral debate on Earth Day dealing with energy and sustainable economic development. Panelist on Texas Tribune symposium addressing the shale boom and the Texas economy with Evan Smith and San Antonio Mayor Ivy Taylor October 2014). Authored and presented TED Talk on the impact of unconventional oil and gas extraction on community development (San Antonio, October 2013).

Radio appearances include Texas Public Radio, WOAI San Antonio, KURV McAllen, KUT Austin, KTSA San Antonio, KWEL Midland-Odessa, KTRH Houston, KSIX Corpus Christi. 2013 Kathi Homan Award (Team Player of the Year); 2013 Award for Excellence; 2014 Award for Integrity - UTSA Institute for Economic Development. Named to the San Antonio Business Journal "Who's Who in Energy" five years running (2012-2016). South Texas Energy and Economic Roundtable (STEER) Eagle Ford Excellence Awards Judge (2013-2016). Leadership UTSA Cohort 5 - Class of 2014. Experience implementing federally funded economic development programs including USAID activities in East Africa, Zambia, Afghanistan and Azerbaijan. Top Secret clearance obtained in 2012.

EDUCATION

Ph.D., Political Economy, University of Texas at Dallas, 2000.

Dissertation Topic - Econometric Analysis: "Outsourcing as a Firm Governance Mechanism: An Empirical Study of Information Technology Outsourcing Determinants and Performance, 1990-1999"

Advisors: Professor Don Hicks and Professor Euel Elliott

M.B.A., Operations Research, University of Texas at Dallas, 1992.

B.B.A., Marketing, University of Texas at Austin, 1979.

Texas Exes Life Member

PROFESSIONAL HISTORY

Nov 2011-Present

Senior Research Director, Institute for Economic Development at the University of Texas at San Antonio. Principal investigator for multiple projects including Eagle Ford Shale Economic Impact Study, South Texas Healthcare Baseline Study, West Texas Energy Consortium Cline Shale Study, Bexar County Economic Development Department Evaluation, and various studies for the San Antonio Economic Development Foundation. Faculty appointment in 2014 at the Center for Urban and Regional Planning in the UTSA College of Architecture, Construction and Planning. Community outreach includes more than 40 speaking engagements annually in the U.S. and Mexico. Peer reviewer for the *Journal of Economic Development in Higher Education*, the *Open Petroleum Engineering Journal*, and the *Journal of the Scholarship of Teaching and Learning*.

**April 2011-
October 2011**

Consultant to small-medium businesses throughout the United States (Phoenix, AZ; Storm Lake, IA; Franklin, TX, Omaha, NE; Virginia Beach, VA; Westminster, SC; Minneapolis, MN). Focused on all aspects of business improvement including sales, operations and finance/accounting.

**Nov 2010-
March 2011**

Component 1 Team Lead for Azerbaijan Competitiveness and Trade (ACT) Project based in Baku for the International Development Group (formerly Sibley International). Management and oversight for project legal staff and economists tasked with developing a business enabling legislative agenda in coordination with the Office of the President, removal of administrative barriers on small businesses, improving public awareness of new legislation designed to streamline business licensing/registration, and implementing improvements to the banking system designed to increase lending to SMEs, particularly in the agribusiness sector. Also acted as senior economist to develop a study on the administrative barriers and their costs to the Azerbaijani hazelnut processing sector.

March-Apr 2010

STTA (short-term technical advisor) assignment as deputy chief of party for Chemonics. Based in Nairobi to work on COMPETE, a USAID-funded East Africa trade expansion and competitiveness project in order to help establish an improved business enabling environment and market access for local businesses. Responsible for overseeing technical advisor activities at the East and Central Africa Trade Hub, regional Customs, Transportation, Staple Foods and Textiles, Competitiveness and Trade Policy areas.

2006 – 2009

Advisory relations executive, ACS (now Xerox), Dallas, Texas. Developed a business model to analyze opportunities and risks for business process reengineering activities. Established strong working relationships with US-based and international business process improvement advisors. Authored and published bi-monthly newsletter distributed to 500+ key analysts/advisors outlining new industry developments and product offerings, which elevated mindshare to targeted community. Authored numerous industry white papers, columns, and a book on consequences of outsourcing, and operations management. Presented at industry conferences, developed workshops for practitioners, was appointed founding co-chair for the Texas Chapter of the International Association of Outsourcing Professionals, and served as a liaison between industry analysts/advisors and ACS project teams. Secured appointment to the Outsourcing Hall of Fame for ACS CEO Lynn Blodgett.

2006

Visiting professor, University of Texas at Dallas. Taught graduate seminar on Business and Government.

1999 – 2006

Senior manager and consultant, KPMG Consulting (now Deloitte), Dallas, Texas. International technical assignments include progressively larger and complex projects with high visibility in both the public and private sectors dealing with policy reform and competitiveness issues. Managed teams of up to 50 people, comprised of both expat advisors and local staff. Excellent track record of success on a wide variety of domestic and international assignments. Previous long-term experience as overseas resident advisor.

USAID contract experience includes developing detailed plans for project components (e.g. DAB infrastructure upgrade, bank process documentation,

power upgrade, VSAT implementation, financial system implementation – Aug 2004 – Nov 2005), reform of banking system, and tracking weekly progress against the baseline, providing regular status updates to USAID representatives in Nairobi and Kabul on a timely basis, providing reports and recommendations as requested (e.g., customs systems, trade flow processes), gathering and producing content for USAID, NGO and government agency newsletters, and coordinating with the program management office on other related projects. Worked to establish stronger working relationships between the Afghanistan Central Bank, the Ministry of Finance, USAID officials and related Ministry Officials in the Afghan government. Provided technical assistance to appropriate and willing Government of Afghanistan entities and think tanks on how to conduct cost/benefit analyses and public appraisal analyses. Assignments included:

- Project Leader, USAID-funded COMESA Knowledge Management Assessment, KPMG Consulting (now Deloitte), Lusaka, Zambia (March - April 2004). Conducted knowledge management assessment and developed action plan for COMESA (Common Market for Eastern and Southern Africa). Hosted roundtables and discussions with government counterparts and related non-government policy stakeholders regarding the benefit of public adoption of more global best practice methodology in the area of cost-benefit analysis in the public spending ministries. Recommendations for COMESA included more formal coordination with regional trade experts, and the use of knowledge sharing systems to decrease redundancy in research on new projects and bringing new team members up to speed more quickly on trade issues and existing research in the sector
- Project Leader, USAID-funded ICT and management assessment for the Northern Corridor TTCA (Transit Transport Coordination Authority) in Mombasa, Kenya (represents Kenya, Uganda, DR Congo, Burundi, and Rwanda – March-April 2004). Recommendations for TTCA included providing a dedicated resource to oversee the regional cargo tracking system. In addition, improved coordination with transport providers to ensure quality, timeliness and accuracy of trade data, and thereby track performance improvements over time. Determined that TTCA would benefit from greater access to the transit module data in ASYCUDA (Automated System for Customs Data Management) either through process improvements or automated interfaces that would in turn lead to improved trade flows.
- Long term position leading all information and communications technology activities for KPMG Consulting in Afghanistan, including:
 - o Deputy Chief of Party, USAID Afghanistan Central Bank Modernization Project, Kabul, Afghanistan (Aug 2004- Nov 2005). Led \$10 million technical, policy and reform components, supported domestic business environment best practices and other necessary reforms, and headed KPMG Consulting (now Deloitte) in-country technical operations representing \$100 million in contract value; worked directly with the central bank governor, first and second deputies, and other senior central bank staff; supervised a team of 50 staff, plus external contractors in modernizing the Afghanistan Central Bank, plus ongoing technical operations improvements at the

Ministry of Finance, Ministry of Commerce, and Ministry of Communication/IT in Kabul and provincial hubs. Scope of work included business enabling banking reforms such as exchange rate policy recommendations to the first deputy of the Da Afghanistan Bank (Afghanistan Central Bank), managing weekly currency auction bids/awards, developing presentations and providing recommendations to the DAB Board of Directors, overseeing upgrade of office networking systems power supply to Central Bank headquarters; built capacity of local bank staff, introduced and supervised implementation of an integrated banking/accounting software package, trained staff to implement new systems, and provided oversight of regional procurement in compliance with federal procurement guidelines and regulations. Developed design and monitoring aspects of infrastructure upgrades.

- o Project manager, USAID Economic Growth and Governance Initiative (EGGI), Kabul, Afghanistan (Aug 2003- Dec 2003). Managed teams of 12-50 staff on cross-cutting operations for USAID economic reform project totaling \$100 million over three years. Worked closely with the Ministry of Finance, other government agencies, USAID and World Bank to develop Afghanistan Registry Authority (ARA). Assisted ARA in business process reengineering, establishing an inventory of existing registries, implementing knowledge management policies, reform of registry processes, registry database management, maximizing revenue flows to the Afghan Treasury, and ensuring that adequate financial and procedural controls were established. Recommended legislative changes to improve efficiency and increase revenues to the Afghanistan Ministry of Finance.
 - o Oversight manager, World Bank-funded Afghanistan Ministry of Finance Tax System Implementation Project, Kabul, Afghanistan (Aug 2003- Dec 2003). Provided supervision and process oversight in efforts to reform the Afghanistan Ministry of Finance Treasury department on issues related to tax collection system implementation, infrastructure, business enablement, process improvement, capacity building, and disaster recovery.
- Project Leader, Guam Telecom Enterprise Zone, US Economic Development Administration (EDA), Guam (March - April 2002). Led a team of advisors to complete a telecommunications feasibility study and action plan for the Guam Economic Development Authority (GEDA). The study analyzed economic, legal, regulatory and infrastructure issues in Guam (population, income, education, land, water, power, local laws, etc.) and assessed the feasibility of developing enterprise zones and a telecommunications hotel, along with economic development recommendations going forward.
- Project Manager, Transportation Security Administration (TSA) Airport Federal Security Checkpoint Upgrade, Dallas-Fort Worth (DFW) Airport and Southern California airports (May - Aug 2002). Led cross functional team including KPMG consultants of 5-8 advisors to implement airport security procedures after 9/11 for newly federalized gate security at DFW Airport;

also implemented new procedures at second-tier southern California airports (Long Beach, Santa Barbara, San Luis Obispo). Federal government mandated rapid ramp-up for the newly established TSA required that contractors provide timely on-site logistical support plus solid project management capabilities in coordination with key public and private stakeholders, including federal security directors, airport management officials. Results: All airport security upgrades were completed on time, on budget and to the satisfaction of the TSA.

- Project Leader, State of Alaska Telecommunications Policy Study, funded by the Alaska Legislature, Juneau (Sept – Dec 2002). Project leader for KPMG Consulting team of 5 advisors to assess the Alaska telecommunications landscape, provide economic analysis, and make policy and legal reform recommendations to the Alaska Legislature in order to improve the business competitive viability of the telecommunications sector. Proposed alternative legal framework and business-friendly legislation and amendments for governing telecommunications competition. Interviewed leading legislative representatives, policy experts, academics and government officials in order to identify impediments to business enabling reform. Researched key issues in close coordination with the Governor's Office of the State of Alaska; final report was distributed to both houses of the Alaska Legislature. Study findings/prescriptions have proven prescient and have been largely validated after over a decade in a fast-changing telecommunications environment.

1998-1999

Business development manager, Everest Group Consulting, Dallas, Texas. Provided best practice management consulting services to executive management at companies with \$1 billion or more in annual revenues. International assignments included development of IT operational strategy for TACA Airlines in El Salvador. Other North American assignments included analysis and recommendations of a major insurer's business processes. Other client's included the Ontario Province of Canadian Government to improve internal operations.

1996

Adjunct faculty, Brookhaven Community College, Farmers Branch, Texas. Taught economics and computer information systems.

1989-1998

Strategic planning and market research manager, SABRE Holdings, Fort Worth, Texas. Served in multiple positions with increasing responsibility managing teams of up to 15 analysts on various economic analysis projects over a ten year period. International assignments include developing market strategy for underperforming subsidiaries in Brazil and Argentina due to a highly regulated business environment as a function of government ownership of flag carrier airlines with minimal prospect for immediate reform. Implementation of key recommendations resulted in Sabre becoming the market leader in both Brazil and Argentina, moving from a second place share (~25%) to a first place share above 40%; designed international business enabling environment (BEE) model for a global travel reservation system comprising 225 countries to achieve maximum impact with limited resources. Model served as basis for future expansion plans and resource allocation by focusing on more promising countries such as China, Ireland and Poland, primarily due to their increased market liberalization and decreased regulatory barriers to trade and investment.

PUBLICATIONS

“Changing Demographics and Political Economy of Texas,” *Texas Politics and Public Policy*, Euel Elliott and Doug Goodman (eds.) Great River Learning (forthcoming 2018).

“Comparative Study of Unconventional Oil and Gas Operations in the Vaca Muerta Shale in Neuquén Province, Argentina,” Report commissioned by the Instituto Argentino del Petroleo y Gas. Institute for Economic Development, *University of Texas at San Antonio* (forthcoming 2017).

“Economic Impact of Fiesta 2016,” Report Commissioned by the Fiesta San Antonio Commission. Institute for Economic Development, *University of Texas at San Antonio* (forthcoming 2017).

“Economic Analysis of Missions San Juan and San Jose,” Report commissioned by the City of San Antonio. Institute for Economic Development and College of Architecture, Construction, and Planning, *University of Texas at San Antonio* (forthcoming 2017).

“Economic Impact of the Eagle Ford Shale Update 2014-2016,” Institute for Economic Development, *University of Texas at San Antonio* (forthcoming 2017).

“Sustainability and Economic Theory: A Policymaker’s Guide to the 21st Century Economy,” Working Paper: SSRN 2939265 (2017).

“Statewide Survey of Historically Underutilized Small and Minority Businesses in Texas,” Report Commissioned by the Governor’s Office. Institute for Economic Development and the Statistical Consulting Center, *University of Texas at San Antonio* (2017).

“Educate First: Why Investing in Education Fuels the Texas Economy,” Co-author. Joint Volunteer Research Project (January 2017).

Book Review. “Designing the New American University,” by Michael Crow and William Dabars. *Journal of Economic Development in Higher Education* (2016) 1(1): 1-2.

“U.S. LNG Markets In Transition,” *International Assn for Energy Economics (IAEE) Energy Forum* (Fourth Quarter 2016).

“Impact of Global Pricing Trends on LNG Export Markets,” *Petroleum Accounting and Financial Management Journal* (2016) 35(2): 23-29.

Editorial Advisor. *The Reform of the Mexican Electricity Sector* by Enrique Ochoa Reza. Producciones Sin Sentido Común (2016).

“Shale and Mexico,” *The Global Impacts of Unconventional Shale Gas Development - Economics, Policy, and Interdependence*, William Hefley and Yongsheng Wang (eds.) Springer (2016).

“Impacts of Small Business in Texas and Analyses of Multiple Factors Affecting Small Business Activity,” Report commissioned by the Governor’s Office. Institute for Economic Development, *University of Texas at San Antonio* (April 2016).

“Challenges for Shale Oil and Gas Development in Mexico,” *Mexico Oil and Gas Review* (2016).

“Where the New Jobs Will Come From,” Op-ed, *Wall Street Journal* (November 5, 2015).

“Iterative Bass Model Forecasts for Unconventional Oil Production in the Eagle Ford Shale,” *Energy* (2015) 93(1): 580-588.

“Northeast Texas Needs Assessment Analysis.” Report commissioned by the University of Texas System. Institute for Economic Development, *University of Texas at San Antonio* (September 2015).

“Oil Prices in 2015,” *International Assn for Energy Economics (IAEE) Energy Forum* (Third Quarter 2015).

“Recent Economic and Community Impact of Unconventional Oil and Gas Exploration and Production on South Texas Counties in the Eagle Ford Shale Area,” *Journal of Regional Analysis and Policy* (2015) 45(1): 82-92.

“Economic Impact and Legal Analysis of the Shale Oil and Gas Activities in Mexico: Preliminary Report,” Institute for Economic Development, *University of Texas at San Antonio* (May 2015).

Reviewer. “An Analysis of the Economic Impact of Unconventional Shale Development in Washington County, Pennsylvania (2011 to 2013,” Prepared by Yongsheng Wang, Diana Stares and Corey Young. Washington & Jefferson College (2015).

“Economic Impacts of Natural Gas Fueling Station Infrastructure and Vehicle Conversions in the Texas Clean Transportation Triangle,” Institute for Economic Development, *University of Texas at San Antonio* (February 2015).

“Beyond U.S. Shale: Unconventional Oil and Gas Opportunities in Mexico and Beyond,” *International Assn for Energy Economics (IAEE) Energy Forum* (First Quarter 2015).

“Eagle Ford and the State of Texas,” *Economics of Unconventional Shale Gas Development: Case Studies and Impacts*, William Hefley and Yongsheng Wang (eds.) Springer (2015).

“Application of the Bass Model to Unconventional Oil Production: A Look at the Eagle Ford Shale in South Texas,” USAEE Working Paper No. 14-181. *Social Science Research Network* (2014).

“Economic Impact of the Eagle Ford Shale,” Institute for Economic Development, *University of Texas at San Antonio* (September 2014).

“Economic Impact of the Eagle Ford Shale,” *Petroleum Accounting and Financial Management Journal* (Summer 2014) 33(2): 11-22.

“America’s Oil Export Policy is Stuck in the ‘70s,” Op-ed, *Wall Street Journal* (August 5, 2014).

“Bexar County Economic Development Strategy Evaluation,” Institute for Economic Development, *University of Texas at San Antonio* (July 2014).

“Economic and Community Impact of Unconventional Oil and Gas Production on South Texas.” Paper presented at the 53rd Meeting of the Southern Regional Science Association (March 2014).

“Economic Impact of Shale Oil and Gas in the West Texas Energy Consortium Region,” Institute for Economic Development, *University of Texas at San Antonio* (2013).

“Texas State Highway 130 Segments 5 and 6 Economic Impact Study,” Institute for Economic Development, *University of Texas at San Antonio* (July 2013).

“Exporting Natural Gas Export Will Stabilize Global Prices,” Op-ed, *Wall Street Journal* (May 30, 2013).

“South Texas Healthcare Baseline Report,” Institute for Economic Development, *University of Texas at San Antonio* (2013).

“Economic Impact of the Eagle Ford Shale,” Institute for Economic Development, *University of Texas at San Antonio* (March 2013).

“Outsourcing and Management: Why Market Realities Will Topple Old School Management Styles,” *European Business Review* (September-October 2012).

“Economic Impact of the Eagle Ford Shale: Baseline Study,” Institute for Economic Development, *University of Texas at San Antonio* (May 2012).

“Hazelnut Administrative Barrier Cost Analysis,” Azerbaijan Competitiveness and Trade Project, USAID (February 2011).

Technical Editor. *Outsourcing for Dummies* by Ed Ashley. Wiley (2008).

Outsourcing and Management, Palgrave (2007).

“Telecommunications Policy Study and Assessment for the State of Alaska.” Report commissioned by the Alaska Governor’s Office and delivered to both houses of the State Legislature. *KPMG Consulting* (2002).

“Telecommunications Feasibility Study for the Territory of Guam.” Report commissioned by the Guam Economic Development Authority and funded by the Economic Development Administration. *KPMG Consulting* (2002).