

# DANIEL COVARRUBIAS, PH.D.

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## EDUCATION

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<b>Deusto Business School, University of Deusto</b> Ph.D. Business Competitiveness and Economic Development	2011
<b>Texas A&amp;M International University</b> Master of Arts in Political Science	2007
<b>University of Texas at San Antonio</b> Master in Business Administration	2002
<b>Instituto Tecnológico y de Estudios Superiores de Monterrey</b> Bachelors in Business Administration	2000

## PROFESSIONAL EXPERIENCE

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**Texas Center for Border Economic and Enterprise Development, Laredo, Texas** 2021 - Present  
*Director*

I lead the Texas Center for Economic and Enterprise Development at the A.R. Sanchez, Jr. School of Business at Texas A&M International University (TAMIU). The essential purpose of the Texas Center is to provide support to private and public entities with research, data analytics, knowledge dissemination, and assistance in border and bi-national socio-economic development efforts. The Center hosts the TAMIU Logistechs Living Lab, a research program focused on Improving the efficiency and competitiveness of cross-border trade and transportation through the use of exponential technologies.

**Center for Socioeconomic and Technological Innovation, Nuevo Laredo, Tamaulipas** 2016 -2021  
*Director*

I started and directed the Center for Socioeconomic and Technological Innovation for the City of Nuevo Laredo, Tamaulipas. The Center's essential purpose is to be a key agent in the modernization and transformation of productive sectors through the dissemination of knowledge and technology in the business sector, allowing it to increase competitiveness through furthering innovation and strengthening the competitive capacity of our cross-border region.

**Ministry of Economy Government of Mexico, Mexico City, Mexico** 2014 - 2016  
*Advisor to the Minister*

I developed public policy analysis and frameworks relative to national and regional competitiveness, innovation, as well as industrial strategy (clusters, global value chains), and participated in the development of a national program which fosters the promotion of the IT sector (PROSOFT). I also analyzed and advanced strategy proposals for the improvement of manufacturing services (Servitization) in Mexico, and assessed the Machine Tool Cluster mechanisms in order to foster systemic improvements with the ultimate goal of automobile value chain import reduction.

**Orkestra - Basque Institute of Competitiveness, San Sebastian, Spain** 2012 - 2014  
*Researcher*

I worked jointly with the group of researchers within the Territory, Innovation and Clusters department of the institute. I developed research in the area of Cross-Border Regional Development, Regional Innovation Systems, Clusters and Territorial Policy, with a focus on the importance of establishing a social base (Social Capital/Social Innovation) in cross-border contexts to further competitiveness and economic development strategies.

**Institute for Competitiveness and International Commerce**, Nuevo Laredo, Tamaulipas

2009 - 2011

*Director*

I directed the operation of five departments of the City of Nuevo Laredo Municipal Government: Competitiveness, International Commerce, Economic Development and Employment, Tourism, and the ICCE Information and Research Center.

**Secretary of Economic Development and Employment**, Nuevo Laredo, Tamaulipas

2005 - 2007

*Secretary*

As Secretary of Economic Development and Employment for the City of Nuevo Laredo, I supervised the operation of five departments of Economic Development: Industry, Commerce, Services, Small Business, and the Municipal Incubator.

## PUBLICATIONS AND WORKING PAPERS

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Cedillo, M. Gaston, **Covarrubias, J. Daniel**, Flores-Franco, J. Eduardo (2024) Analytic model to mitigate the risk of road transportation cargo theft: A Physical Internet approach.

**Computers & Industrial Engineering**, Volume 190, ISSN 0360-8352, <https://doi.org/10.1016/j.cie.2024.110016>.

Pina-Barcenas, Jared, Cedillo, M. Gaston, **Covarrubias, J. Daniel** (2023) A graph theory-based logistics approach to the digital transformation of freight transportation corridors management.

**Mobile Networks and Applications**. Springer Link. <https://doi.org/10.1007/s11036-023-02283-8>

Cedillo, M. Gaston, **Covarrubias, J. Daniel**, et.al (2023) COVID-19 effects on the freight transportation systems in Mexico: A demand and supply shock analysis.

**Center for the Study of Western Hemispheric Trade Working Paper**.

**Covarrubias, J. Daniel**, Cedillo, M. Gaston, Lozano, H, (2023) Smart Borders: The Key to more resilient International Trade and Cross-Border Transportation

**Texas Center for Border Economic and Enterprise Development Working Paper**.

Cedillo, M. Gaston, **Covarrubias, J. Daniel**, (2022) Physical Internet based transportation resilience to cargo theft risk.

**Texas Center for Border Economic and Enterprise Development Working Paper**.

**Covarrubias, J. Daniel**, Vela, J. Humberto, Urarte, Iñigo (2020) Innovando de Abajo hacia Arriba: El Caso de Estudio del Centro de Innovacion Socioeconomica y Tecnologica desde una perspectiva de Investigacion Accion.

**Center for Socioeconomic and Technological Innovation - CIST Working Paper**.

**Covarrubias, J. Daniel**. (2017) Analyzing how a Social Base Impacts Economic Development and Competitiveness Strategies in a Cross-Border Context: The Case of Region Laredo.

**Journal of Borderland Studies**. Association of Borderland Studies. Taylor and Francis. <https://doi.org/10.1080/08865655.2016.1270168>

## MANUSCRIPTS IN SUBMISSION

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Cedillo, M. Gaston, **Covarrubias, J. Daniel**, et.al (Forthcoming) COVID-19 effects on the freight transportation systems in Mexico: A demand and supply shock analysis.

Article submitted to **International Journal of Logistics Management** (Under Second Round of Peer Review)

**Covarrubias, J. Daniel**, Cedillo, M. Gaston, Lozano, H, (Forthcoming) Smart Borders: The Key to more resilient International Trade and Cross-Border Transportation

Article submitted to **Journal of Borderlands Studies** (Under Review)

## ACADEMIC PRESENTATIONS

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Covarrubias, J. Daniel (2024, April) From Globalization to Regionalization: Analysis of Texas Cross-Border Goods Movement. **Presented at the Association for Borderlands Studies 2024 Conference. San Antonio, Texas.**

Covarrubias, J. Daniel (2024, February) From Globalization to Regionalization: Analysis of Texas Cross-Border Goods Movement. **Presented at the II French-Mexican-Texan Colloquium “Somos Vínculos”, TAMIU - Laredo, Texas.**

Covarrubias, J. Daniel (2023, April) Smart Borders: The key to more resilient International Trade and Cross-Border Transportation. **Presented at the Association for Borderlands Studies 2023 Conference. Tempe, Arizona.**

Cedillo, M. Gaston, **Covarrubias, J. Daniel**, et.al (2023, April) COVID-19 effects on the freight transportation systems in Mexico: A demand and supply shock analysis. **Presented at the Center for the Study of Western Hemispheric Trade 2023 Conference. Laredo, Texas.**

Covarrubias, J. Daniel. (2018, April) El Presente nos Llama a Innovar: El Caso de Estudio del Centro de Innovación Socioeconómica y Tecnológica de la Región de Nuevo Laredo-Laredo Como Impulsor de Sistemas Regionales de Innovación Transfronterizos. **Presented at the Association for Borderlands Studies 2018 Conference. San Antonio, Texas.**

Alcalde, Henar, **Covarrubias, J. Daniel**, Irastorza, Olga, Kamp, Bart, Lorenz, Usue (2014, November) Promoting Cross-Border Inter-clustering: The case of the Aquitaine - Euskadi Euroregion **Presented at the 17th Annual TCI Global Conference. Monterrey, Nuevo Leon, MX.**

Covarrubias, J. Daniel. (2014, April) Highlighting the People Factor; Analyzing how a Social Base Impacts Economic Development and Competitiveness Strategies in a Cross-Border Context, Comparing Different Worlds - Aquitaine Euskadi Cross-Border Space and Region Laredo. **Presented at the Association for Borderlands Studies 2014 Conference “Borders as Signs of the Times!” Albuquerque, New Mexico.**

**Covarrubias, J. Daniel**, Magro Edurne, Murciego Asier, Wilson James (2013, November) Understanding innovation policy-mix and their implications for evaluation. **Presented at the “New Horizons - New challenges”, Evaluation of STI policies, instruments and organizations 2013 Conference. Vienna, Austria.**

Covarrubias, J. Daniel. (2013, October) Bridging the Gap: Socially Integrating Cross-Border Regions, Comparing Different Worlds – Aquitaine Euskadi Cross-Border Space and Region Laredo. **Presented at the 8th Seminario Internacional en Políticas Regionales de Innovación. San Sebastián, España.**

Covarrubias, J. Daniel. (2013, June) Highlighting the people factor; analyzing how a Social Base impacts Economic Development and Competitiveness strategies in a Cross-Border context - The case of the Aquitaine – Euskadi Cross-Border Space. **Presented at the 16th Uddevalla Symposium 2013 on: “Innovation, High-growth Entrepreneurship and Regional Development”. Kansas City, MO. USA.**

Larrea, Miren, Estensoro, Miren, **Covarrubias, J. Daniel**. (2013, April) The Territorial Social Innovation Approach Perspective for Sustainable (Rural) Development Processes. **Presented at the Agderforskning - University of Agder (Norway) / Orkestra Workshop for Culture-based Rural Development Strategies. San Sebastian, España.**

Wilson, James, Magro, Edurne, Covarrubias, J. Daniel, Murciego, Asier, (2012, November) Como evaluar desde la complejidad? El caso de las políticas de cooperación para la innovación del País Vasco. **Presented at the Workshop for Policy Evaluation as a support mechanism for Policy Learning. San Sebastián, España.**

Covarrubias, J. Daniel. (2012, October) Why a Social Base is necessary for implementing Economic Development and Competitiveness strategies in a Cross-Border Context: The case of Region Laredo.

## OTHER PUBLICATIONS

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Covarrubias, J. Daniel (2024), Crossing borders, connecting economies: Port Laredo's rise as America's top trade Gateway  
*Op-Ed, Laredo Morning Times, sec. LMT Business Journal*

Covarrubias, J. Daniel (2024), From neighbors to partners: The evolution of U.S.-Mexico trade  
*Op-Ed, Laredo Morning Times, sec. LMT Business Journal*

Covarrubias, J. Daniel (2024), Introducing 'Crossing Paths: Insights into U.S. International Trade'  
*Op-Ed, Laredo Morning Times, sec. LMT Business Journal*

Covarrubias, J. Daniel (2023), Beyond 2023: Innovation and Digital Transformation as Pillars for Growth in 2024  
*Op-Ed, Laredo Morning Times, sec. LMT Business Journal*

Covarrubias, J. Daniel (2023), Desarrollando líderes digitales: el nuevo horizonte de las escuelas de negocios  
*Artículo de Opinión, Latitudex Logística y Comercio Exterior, Grupo DICEX*

Covarrubias, J. Daniel (2023), Bridging the Digital Divide: Equipping Business School Students for the Future of Work  
*Op-Ed, Laredo Morning Times, sec. LMT Business Journal*

Covarrubias, J. Daniel (2023), Modernizing cross-border trade infrastructure: A North American imperative for growth and security  
*Op-Ed, Laredo Morning Times, sec. LMT Business Journal*

Covarrubias, J. Daniel (2023), El futuro del comercio transfronterizo: la construcción de una fuerza laboral centrada en la IA  
*Columna Invitada, T21*

Covarrubias, J. Daniel (2023), The future of cross-border trade: Building an A.I.-centric workforce  
*Laredo Morning Times, sec. LMT Business Journal*

Covarrubias, J. Daniel (2023), Reimaginando el comercio transfronterizo a través del Blockchain  
*Columna Invitada, T21*

Covarrubias, J. Daniel (2023), Reimagining Cross-Border Trade through Blockchain  
*Op-Ed, Laredo Morning Times, sec. LMT Business Journal*

Covarrubias, J. Daniel (2023), Cómo ChatGPT transformará la clasificación de aranceles en la frontera de Texas-México  
*Columna Invitada, T21*

Covarrubias, J. Daniel (2023), A.I.-Powered Efficiency: How ChatGPT Will Transform the Work of Import/Export Tariff Classification Analysts in the Texas-México Border  
*Op-Ed, Laredo Morning Times, sec. LMT Business Journal*

Covarrubias, J. Daniel (2023), The future is autonomous: How self-driving trucks will revolutionize logistics, supply chain, and transportation sectors  
*Op-Ed, Laredo Morning Times, sec. LMT Business Journal*

Covarrubias, J. Daniel & Cedillo-Campos, M. (2023, Winter). A Living Lab at the Southern Border.  
*The Wilson Quarterly, A Product of the Wilson Center*

Covarrubias, J. Daniel (2023), AI's Impact on Business: Opportunities and Challenges Ahead  
*Op-Ed, Laredo Morning Times, sec. LMT Business Journal*

Covarrubias, J. Daniel (2022), New report measures TAMIU's \$365M economic impact on the Webb County economy  
*Op-Ed, Laredo Morning Times, sec. LMT Business Journal*

Covarrubias, J. Daniel (2022), The Physical Internet: A potential game changer for cross-border logistics  
*Op-Ed, Laredo Morning Times, sec. LMT Business Journal*

Covarrubias, J. Daniel (2022), A place-based approach to innovation can advance the Texas-Mexico region  
*Op-Ed, Laredo Morning Times, sec. LMT Business Journal*

Covarrubias, J. Daniel (2022), The Texas-Mexico border: An economic powerhouse  
*Op-Ed, Laredo Morning Times, sec. LMT Business Journal*

Covarrubias, J. Daniel (2022), Land ports of the future: Where are we heading?  
*Op-Ed, Laredo Morning Times, sec. LMT Business Journal*

Covarrubias, J. Daniel (2022), 2022: The tech future is here in Texas  
*Op-Ed, Laredo Morning Times, sec. LMT Business Journal*

Covarrubias, J. Daniel (2021), Let's talk about innovation  
*Op-Ed, Laredo Morning Times, sec. LMT Business Journal*

Covarrubias, J. Daniel (2021), LOGISTECHS: La Salvacion de Nuestras Cadenas de Suministro?  
*Articulo de Opinion, Latitudex Logistica y Comercio Exterior, Grupo DICEX*

Covarrubias, J. Daniel (2021), Port Laredo: The Million-Mile Logistechs Hub  
*Op-Ed, Laredo Morning Times, sec. LMT Business Journal*

Covarrubias, J. Daniel (2021), Is Logistics 4.0 the answer to our supply chain woes?  
*Op-Ed, Laredo Morning Times, sec. LMT Business Journal*

## FUNDING AND GRANTS

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**Project:** Design and Implementation of a Bi national Air Quality Measurement System at the Laredo, Texas/Nuevo Laredo, Tamaulipas Cross Border Region

**Funding Institution:** North American Development Bank (NADBANK)  
Sub-award from Texas A&M Transportation Institute (TTI)

**Amount Awarded:** \$57,008

**Funding Period:** 2023-2024

**Role in Project:** Co-Principal Investigator

**Project:** Accelerating Credentials Planning Grant

**Funding Institution:** Texas Higher Education Coordinating Board (THECB)

**Amount Awarded:** \$50,000

**Funding Period:** 2022

**Role in Project:** Principal Investigator

**Project:** Coahuila Innovacion 4.0 (Creation of an Industrial Innovation Center in Saltillo, Coahuila, MX.)

**Funding Institution:** Secretaria de Economia PROSOFT (Mexico Ministry of Economy)

**Amount Awarded:** \$7,000,000.00 MXP (354,679.50 USD)

**Funding Period:** 2018 - 2019

**Role in Project:** Leader

**Project:** Creation of an Industrial Innovation Center in Nuevo Laredo, Tamaulipas, MX.

**Funding Institution:** Secretaria de Economia PROSOFT (Mexico Ministry of Economy)

**Amount Awarded:** \$5,000,000.00 MXP (253,342.50 USD)

**Funding Period:** 2017 - 2019

**Role in Project:** Leader

## COURSES TAUGHT

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**University:** Texas A&M International University

**Program:** Bachelor of Business Administration with a major in Management Information Systems and Data Analytics (BBA-MIS)

**Course:** 1. MIS-4399-161 Issues in Information Systems (Digital Transformation)  
2. MGT-4399-301 Issues in Management (Logistechs and Digital Transformation Management)

**University:** Deusto Business School

**Program:** Master in Competitiveness and Innovation

**Module:** Innovation and Competitiveness: Theory and Measurement

**Courses:** 1. Introduction to Cross-Border Cooperation, Competitiveness and Economic Development  
2. Socially Integrating Cross-Border Regions  
3. Introduction to Local Economic Development and Social Innovation

## SPEAKING ENGAGEMENTS

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**Speaker** - Nearshoring and Cross-Border Trade Trends March 13, 2024  
**El Paso Chamber of Commerce and Mexico Now Border Trade and Economic Forum - El Paso, Tx.**

**Speaker** - A.I. Trends and What to Expect February 24, 2024  
**National Academy of Arbitrators AI in the Workplace and Collective Bargaining Conference, Dallas, Tx.**

**Speaker** - Cross Border Shipping - From Compliance and Customs to Transport February 6, 2024  
**Manifest: The Future of Supply Chain Global Conference, Las Vegas, Nv.**

**Panelist** - Robotics and Supply Chain December 6, 2023  
**Texas Technology Task Force, San Antonio, Tx.**

**Speaker** - Economic Benefits of Goods Movement in Texas October 11, 2023  
**Texas Department of Transportation (TxDOT) Short Course, College Station, Tx.**

**Speaker** - Tecnologias para el Nearshoring October 4, 2023  
**T21 ETYL - Encuentro de Transporte y Logistica, Monterrey, Mx.**

**Speaker** - From Globalization to Regionalization: The Evolution of U.S.-Mexico Cross-Border Trade September 21, 2024  
**Expeditors Global Logistics Conference, Monterrey, Mx.**

**Panelist** - Panel 5: Mobility in the Economic Integration of the Border August 31, 2023  
**North American Development Bank (NADBank) Summit 2023, San Antonio, Tx.**

**Keynote Speaker** - Economy and Nearshoring: Keys for logistics and transportation July 6, 2023  
**ANTP 2023: Foro Nacional del Transporte de Mercancias, Playa del Carmen, Mx**

**Panelist** - Panel 3 – Trends and Opportunities to Enhancement Cross-border Movement of Goods June 21, 2023  
**Wilson Center Mexico Institute Building a Competitive US-Mexico Border Conference**

**Panelist** - Panel Areas for future APEC work on Supply Chain Digitalization February 18, 2023  
**Asia Pacific Economic Cooperation (APEC) Conference 2023, Palm Springs, Ca.**

**Keynote Speaker** - Smart Borders: The Key To More Resilient International Trade And Cross-Border Transportation,

Washington, D.C.

January 1, 2023

**National Academies of Sciences, Engineering, and Medicine Transportation Research Board  
102nd Annual Meeting - Standing Committee on International Trade and Transportation**

**Panelist** - Session 1-Port Laredo

September 22, 2022

**Laredo Economic Development Corporation Pathways for Trade Symposium**

**Keynote Speaker** - Logistechs: Impacto y Aplicaciones de Nuevas Tecnologías en las Cadenas de Suministro September 21, 2022  
**84 Aniversario Asociacion de Agentes Aduanales de Nuevo Laredo**

**Speaker** - Logistechs: Port Laredo's Key to Continued and Sustainable Growth

April 26, 2022

**Laredo Chamber of Commerce Vision 2022 Conference**

## RESEARCH INTERESTS

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Logistechs, Cross-Border Trade and Transportation, Economic Development, Territorial Innovation Models, Cross-Border Co-operation, and Innovation and Entrepreneurship

## SERVICE TO PROFESSION

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ASTM International F49 Committee on Digital Supply Chain 2023 - Present  
*Member*

U.S. Customs and Border Protection (CBP) Commercial Customs Operations  
Advisory Committee's (COAC) Working Group on Cross-Border Recognition 2022 - Present  
*Member*

Deusto University - Bulletin of Economic Studies 2021 - Present  
*Member of the Editorial Board*

National Academies of Sciences, Engineering, and Medicine Transportation Research Board (TRB)  
Standing Committee on International Trade and Transportation 2021 - Present  
*Member and Committee Research Coordinator*

U.S.-Mexico Foundation C26+ Smart Borders Working Group 2021 - Present  
*Member*

Association of Borderland Studies 2013 - Present  
*Member and Executive Secretary and Treasurer*

## UNIVERSITY SERVICE

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TAMIU Academic and Industry Readiness in Engineering and Sciences (AIRES) Incubatorship Advisory Group 2023 - Present

TAMIU A.R. Sanchez, Jr. School of Business Dean's Steering Committee 2021 - Present

## MEDIA APPEARANCES

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Nearshoring and modernizing cross-border trade infrastructure  
*Spectrum News, Austin's Capital Tonight, August 1, 2023*

TAMIU director attends Mexico City TradeHub summit on global trade  
*Laredo Morning Times, July 17, 2023*

The Booming Texas Border Town at the Center of a Global Trade Shift  
*The Wall Street Journal, In-Depth Video Features, May 1, 2023*

TAMIU director presents 'Smart Borders' presentation at Arizona conference  
*Laredo Morning Times, May 2, 2023*

Truck bottleneck at Texas-Mexico border  
*PBS-KLRN, On the Record, April 14, 2023*

TAMIU participates in the Asia Pacific Economic Cooperation 2023 Summit  
*Laredo Morning Times, March 6, 2023*

Local Academic Weighs In On Major Railway Project Moving To Mexico  
*Laredo Morning Times, May 15, 2022*

Pandemic causes shortage of microchips for new cars  
*Laredo Morning Times, September 9, 2021*

## CERTIFICATIONS

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Strategic Innovation, ESADE Business School <b>Certificate of Completion</b>	2021
Initiation and Sensibilization to Industry 4.0, Tecnalia Research and Innovation <b>Certificate of Completion (16 hours)</b>	2018
Intelligent Artificial Vision Systems, Tecnalia Research and Innovation <b>Certificate of Completion (40 hours)</b>	2018
Digitalization, IoT, Big Data and Data Analytics, Tecnalia Research and Innovation <b>Certificate of Completion (40 hours)</b>	2018
Cybersecurity, Tecnalia Research and Innovation <b>Certificate of Completion (40 hours)</b>	2018
Augmented Reality and Virtual Reality, Tecnalia Research and Innovation <b>Certificate of Completion (40 hours)</b>	2018
BUS ADM 2022 - 001 Keys To Successful Entrepreneurship, UC Berkeley Extension <b>Certificate of Completion</b>	2017
Microeconomics of Competitiveness (MOC), Orkestra - Basque Institute of Competitiveness / Harvard Institute for Strategy and Competitiveness <b>Certificate of Completion</b>	2012
Social Network Analysis, Coursera, University of Michigan <b>Certificate of Completion</b>	2012



## ACKNOWLEDGMENTS

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TCI Network - The Competitiveness Institute <i>Best Rated Speaker from Workshop Sessions</i>	2013
15th Annual TCI Global Conference <i>Most Inspiring Presentation Award</i>	2012
Instituto Nacional para el Federalismo y Desarrollo Municipal <i>Premio Nacional al Desarrollo Municipal</i>	2010
Instituto Nacional para el Federalismo y Desarrollo Municipal <i>Premio Nacional al Desarrollo Municipal</i>	2009
Centro de Investigacion y Docencia Economicas,A.C. <i>Premio Gobierno y Gestion Local</i>	2009
State of the World Forum <i>Member of the Emerging Leaders Delegation</i>	1999

## PRIVATE SECTOR EXPERIENCE

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<b>Climas, Servicios y Ductos de Nuevo Laredo S.A. de C.V.</b> , Nuevo Laredo, Tamaulipas	2007 - 2009
<i>General Manager</i>	2001 - 2004
I oversaw the business administration of a small family owned business.	