

Research in Administrative Sciences Under COVID-19

This page intentionally left blank

Research in Administrative Sciences Under COVID-19

EDITED BY

MÓNICA LORENA SÁNCHEZ LIMÓN

Universidad Autónoma de Tamaulipas, México

and

MARÍA LUISA SAAVEDRA GARCÍA

Universidad Nacional Autónoma de México, Mexico



United Kingdom – North America – Japan – India – Malaysia – China

This page intentionally left blank

Reviewers

Domestic:

Dr Lorena Álvarez Castañón. Universidad de Guanajuato, Mexico

Dr Deyanira Bernal Domínguez. Universidad Autónoma de Sinaloa, Mexico

Dr Guadalupe del Carmen Briano Turrent. Universidad Autónoma de San Luis Potosí, Mexico

Dr Juan Carlos Centeno Maldonado. Universidad Autónoma de Coahuila, Mexico

Dr Rosario Cortes Castillo. Instituto Politécnico Nacional, Mexico

Dr Alejandro Ibarra Yúnez. EGADE Business School, Tecnológico de Monterrey, Mexico

Dr Pablo Daniel Palacios Duarte. Benemérita Universidad Autónoma de Puebla, Mexico

Dr Teresa Vargas Vega. Universidad Autónoma del Estado de Hidalgo, Mexico

Dr Paola Selene Vera Martínez. Universidad Nacional Autónoma de México, Mexico

International:

Dr Rosa Aura Casal de Altuve. Universidad de Los Andes, Venezuela

Dr Carmen López Pérez. Universidad de Sevilla, Spain

Dr Rosana Melean Romero, Universidad de Zulia, Venezuela

Dr Yorbeth Montes de Oca Rojas. Universidad Luis Vargas Torres de Esmeraldas, Ecuador

Dr Berta Silva Palavecinos. Pontificia Universidad Católica de Valparaíso, Chile

Dr José Luis Peña Alonso. Universidad de Burgos, Spain

Dr Mary Analí Vera-Colina. Universidad Nacional de Colombia, Colombia

Emerald Publishing Limited
Howard House, Wagon Lane, Bingley BD16 1WA, UK

First published by ACACIA as *La Investigación en Ciencias Administrativas ante el COVID-19*, 2021

English language translation copyright © 2022 Emerald Publishing Limited.

This edition published under exclusive licence from ACACIA, A.C., by Emerald Publishing Limited.

Translated by Tiziana Laudato. This book has been peer-reviewed.

The moral right of the copyright holder and translator has been asserted.

Reprints and permissions service

Contact: permissions@emeraldinsight.com

No part of this book may be reproduced, stored in a retrieval system, transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise without either the prior written permission of the publisher or a licence permitting restricted copying issued in the UK by The Copyright Licensing Agency and in the USA by The Copyright Clearance Center. Any opinions expressed in the chapters are those of the authors. Whilst Emerald makes every effort to ensure the quality and accuracy of its content, Emerald makes no representation implied or otherwise, as to the chapters' suitability and application and disclaims any warranties, express or implied, to their use.

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

ISBN: 978-1-80262-298-0 (Print)

ISBN: 978-1-80262-297-3 (Online)

ISBN: 978-1-80262-299-7 (Epub)



ISOQAR certified
Management System,
awarded to Emerald
for adherence to
Environmental
standard
ISO 14001:2004.

Certificate Number 1985
ISO 14001



INVESTOR IN PEOPLE

Table of Contents

About the Editors	ix
About the Contributors	xi
Preface	xv
Presentation	xvii

Introduction

<i>Mónica Lorena Sánchez Limón and María Luisa Saavedra García</i>	1
--	---

Part I Companies and SMEs

Chapter 1 The Systemic Competitiveness of Latin American MSMEs Under COVID-19

<i>María del Rosario Demuner Flores, María Luisa Saavedra García and Elsa Esther Choy Zevallos</i>	5
--	---

Chapter 2 The Contingency Approach to COVID-19 of Subsistence Businesses

<i>Arcelia Toledo López and Dora Lilia Guzmán Cruz</i>	31
--	----

Chapter 3 Effects of the COVID-19 Pandemic on the Top Seven Mexican Exporting Companies

<i>Héctor Alonso Olivares Aguayo and Ana Laura Medina Conde</i>	49
---	----

Part II Human Capital and Knowledge Management

Chapter 4 Multi-case Study of Knowledge Management at UNAM. Responses Under COVID-19

<i>María Guadalupe Calderón Martínez</i>	67
--	----

Chapter 5 The Impact of Burnout on University Workers' Intention to Quit in Times of COVID-19 <i>Mónica Lorena Sánchez Limón, Mariana Zerón Félix and Oscar Galván Mendoza</i>	89
Chapter 6 Issues that Impact Academic Stress When Working Remotely Under COVID-19: Scale Reliability <i>Sergio Madero Gómez and Oscar Eliud Ortiz Mendoza</i>	99
Chapter 7 Technostress in University Students as an Effect of the Coronavirus Pandemic <i>Julián Ferrer Guerra, Martha Ríos Manríquez and Carlos Alberto Moncada Sierra</i>	117
 Part III Marketing and Business Strategies	
Chapter 8 The Influence of E-commerce on Consumption Habits Under COVID-19 in the City of Durango, Mexico <i>José Gerardo Ignacio Gómez Romero, Francisco Martín Villarreal Solís and Xochitl Escamilla Arango</i>	137
Chapter 9 Design Thinking as a Methodological Strategy for the Economic Reactivation of Start-ups in Mexico Under COVID-19 <i>Guillermo Flores Téllez, Jaime Garnica González and Heriberto Niccolas Morales</i>	155
Chapter 10 Corporate Social Responsibility in the COVID Era. An Exploratory Literature Review <i>Alan Francisco Rodríguez Jasso, Lucero de Jesús Rodríguez Jasso and Arturo Briseño García</i>	177
Index	193

About the Editors

Mónica Lorena Sánchez Limón, PhD in Management from Universidad Nacional Autónoma de México, is a Full-time Professor at Universidad Autónoma de Tamaulipas, School of Commerce and Administration, Victoria Campus and a Member of the National System of Researchers, Level II, and certified by the National Association of Faculties and Schools of Accounting and Administration. She is also the National President of the Academy of Administrative Sciences ACACIA, A.C. and a Member of the Academy of Management and European Academy of Management. <https://orcid.org/0000-0002-0671-0076>

María Luisa Saavedra García, PhD in Management from Universidad Nacional Autónoma de México, is a Full-time Professor at Universidad Nacional Autónoma de México, School of Accounting and Management and a Member of the National System of Researchers, Level II. She is a recipient of the National University Award in Teaching from UNAM, the National Vice President of Chapters of the Academy of Administrative Sciences ACACIA, A.C., and the President of the Research Commission of the Mexican Institute of Finance Executives. <https://orcid.org/0000-0002-3297-1157>

This page intentionally left blank

About the Contributors

Arturo Briseño García, PhD in Administrative Sciences from EGADE Business School at Tecnológico de Monterrey, is a Research Professor at Universidad Autónoma de Tamaulipas, School of Commerce and Administration, Ciudad Victoria campus, a Candidate to national researcher at the National System of Researchers, and an Editor of the *Ciencias Administrativas Teoría y Praxis* journal. <https://orcid.org/0000-0002-6567-241X>

María Guadalupe Calderón Martínez, PhD in Economics and Management of Innovation and Technology Policy from Universidad Complutense de Madrid, is a Full-time Professor at Universidad Nacional Autónoma de México, FES Cuautitlán, Member of the Faculty of Tutors of the Graduate Programme in Management Sciences at UNAM, Member of the National System of Researchers, Level I, and is responsible for the Entrepreneurship Chapter of the Academy of Administrative Sciences ACACIA, A.C. <https://orcid.org/0000-0002-8257-9057>

Elsa Esther Choy Zevallos, PhD in Sciences Accounting and Business from Universidad Alas Peruanas, is a Full-time Professor at Universidad Nacional Mayor de San Marcos, School of Accounting Sciences. She is a Researcher with National Scientific and Technological Registry, MR group, Level I, is a recipient of the Scientific Merit Award from the UNMSM, and is a Member of the Inter-American Accounting Association Technical Commission of Accounting Research. <https://orcid.org/0000-0001-8580-8495>

María del Rosario Demuner Flores, PhD in Economic-Administrative Sciences from Universidad Autónoma del Estado de México, is a Full-time Professor at Universidad Autónoma del Estado de México, School of Accounting and Management and a Member of the National System of Researchers, Level I, with PRODEP Profile. She is the Director of *Revista de Estudios en Contaduría, Administración e Informática*. <http://orcid.org/0000-0002-4542-9113>

Xochitl Escamilla Arango has a Master's degree in Business Management from Universidad Juárez del Estado de Durango, with emphasis in creation of micro-, small-, and medium-sized enterprises management and is a Full-time research Professor in Software Engineering at Universidad Politécnica de

Durango and works at Guión Bajo 13, as Frontend Developer. <https://orcid.org/0000-0003-0311-8939>

Julián Ferrer Guerra has a Master of Science in Information Systems from the Instituto Tecnológico y de Estudios Superiores de Monterrey. He is a Research Professor at the Tecnológico Nacional de México in Celaya, Department of Economic and Administrative Sciences and a Member of Acacia and the ANFECA Academy. <https://orcid.org/0000-0002-0178-8851>

Guillermo Flores Téllez, PhD in Industrial Engineering from Universidad Autónoma del Estado de Hidalgo, is a Director of Research and Innovation of the Systematic Training Centre for the Development of Technologies, CASDT. He is the President of the World Hosin Kwonbub Federation, Mexico branch for South Korea, the President of the Mexican Federation of Applied Sports Sciences, Puebla, Mexico, and Vice President of the Mexican Association of TRIZ for Mexico and Latin America. <https://orcid.org/0000-0002-9881-4402>

Oscar Galván Mendoza, PhD in Administrative Sciences from la Universidad Autónoma de Ciudad Juárez, is a Full-time Research Professor at Universidad Autónoma de Baja California, School of Social and Management Sciences, Ensenada, Baja California and is a Coordinator of the Master's programme in taxation at the same institution. He is a Candidate to national researcher of the National System of Researchers and is a winner of first place in the National Postgraduate Thesis Award by ANFECA. <https://orcid.org/0000-0001-6136-2214>

Jaime Garnica González, PhD in Strategic Planning and Technology Management from Universidad Popular Autónoma de Puebla, is a Full-time Professor at Universidad Autónoma del Estado de Hidalgo, Institute of Basic Sciences and Engineering and a Member of the National System of Researchers, Level I. He has been recognised three times by the World Hosin Kwonbub Federation for technological contributions and is responsible for the Operations Management, Engineering and Systems Management Chapter of ACACIA. He is a Member of the Mexican Association of TRIZ for Mexico and Latin America. <https://orcid.org/0000-0002-2453-5144>

José Gerardo Ignacio Gómez Romero, PhD in Management from Universidad Autónoma de Aguascalientes, is a Full-time Professor at Universidad Juárez del Estado de Durango, School of Economics, Accounting and Administration and a Member of the Academy of Administrative Sciences ACACIA. <https://orcid.org/0000-0002-6322-6133>

Dora Lilia Guzmán Cruz has a Master's degree in Management from Instituto Tecnológico de Oaxaca. She is a Full-time Professor at Instituto Politécnico Nacional, CIIDIR Unidad Oaxaca, a Member of the Academy of Natural Resources Management at CIIDIR Oaxaca, and a COFAA-IPN Fellow. <https://orcid.org/0000-0002-9815-3229>

Sergio Madero Gómez, PhD in Economics and Business Management from Universidad de Deusto, San Sebastián campus, Spain, is a Full-time Professor at the Business School at Tecnológico de Monterrey, Monterrey N.L. and a Member of the National System of Researchers, Level I. He is the Vice President of Committees of the Academy of Administrative Sciences and a Member of the Academy of Management and the Academy of International Business. <https://orcid.org/0000-0003-3996-7609>

Ana Laura Medina Conde, PhD in Law and Legal Argumentation from Universidad Autónoma de Tlaxcala, is a Postdoctorate in Law from Universidad de Zaragoza, Spain and a Full-time Professor at Universidad Autónoma de Tlaxcala, School of Law. She is a Member of the National System of Researchers, Level I and is responsible for the Legal Aspects in Organizations Chapter of the Academy of Administrative Sciences ACACIA. <https://orcid.org/0000-0003-4203-4383?lang=en>

Carlos Alberto Moncada Sierra is a Mechatronics Engineer at the Tecnológico Nacional de México in Celaya. He is a Candidate for a Master's degree in Administrative Management at the Tecnológico Nacional de México in Celaya and an Industrial Engineering Intern at Universidad Virtual del Estado de Guanajuato. He is the Cultural Representative of the state of Guanajuato in the United States, Canada, and Japan and Co-founder and former President of the altruistic group Linces por el Servicio at the Tecnológico Nacional de México in Celaya.

Heriberto Niccolas Morales, PhD in Strategic Planning and Technology Management from Universidad Popular Autónoma de Puebla, is a Full-time Professor at Universidad Autónoma del Estado de Hidalgo, Institute of Basic Sciences and Engineering, Academic Area of Engineering and Architecture. He has a recognition of Desirable Profile by the Program for the Development of Teaching Personnel (PRODEP) belonging to the Ministry of Public Education (SEP). He is a Member of the Mexican Association of TRIZ, A.C. <https://orcid.org/0000-0002-6402-121X>

Héctor Alonso Olivares Aguayo, PhD in Economics from Instituto Politécnico Nacional, is a Full-time Level B Research Professor at Universidad LA Salle Mexico, Business School, Condesa Campus. He is a Candidate for National Researcher of the National System of Researchers and a Member of the Mexican Actuarial College and the International Risk and Actuarial Association. <https://0000-0003-2609-8627>

Oscar Eliud Ortiz Mendoza has a Master's degree in Telecommunications Administration from Tecnológico de Monterrey, Monterrey Campus and is a PhD candidate in Management from EGADE Business School at Tecnológico de Monterrey. <https://orcid.org/0000-0001-6432-589X>

Martha Ríos Manríquez, PhD in Accounting and Auditing from Universidad Complutense de Madrid, is a Research Professor at University of Guanajuato, School of Administrative Sciences, Campus Celaya²-Salvatierra. She is a Level II Researcher of the National System of Researchers, PRODEP Profile Professor, responsible for liaison in the Academy of Administrative Sciences ACACIA, A.C., Member of the RAITES network, President of the International Network RENUTEG, Member of the research group in Spain ICGEEP, and Editor of the *RAITES Journal* and *Acta Universitaria*. <http://orcid.org/0000-0002-3752-9886>

Alan Francisco Rodríguez Jasso has a Master's degree in International Business from Universidad Autónoma de Tamaulipas and is a student on the Doctorate Programme in Administrative Sciences at Universidad Autónoma de Tamaulipas, School of Commerce and Administration, Ciudad Victoria Campus. <https://orcid.org/0000-0001-9489-4874>

Lucero de Jesús Rodríguez Jasso has a Master's degree in Business Administration with emphasis in Strategic Management from Universidad Autónoma de Tamaulipas and is a Doctoral student in Administrative Sciences at Universidad Autónoma de Tamaulipas, School of Commerce and Administration, Ciudad Victoria Campus. <https://orcid.org/0000-0002-7475-7685>

Arcelia Toledo López, PhD in Philosophy in Management from the EGADE-ITESM Business School, is a Full-time Professor at the Instituto Politécnico Nacional, CIIDIR Unidad Oaxaca. She is a Member of the National System of Researchers, Level I, President of the Academy of Natural Resources Management at CIIDIR Oaxaca, and is responsible for the SMEs chapter at the Academy of Administrative Sciences ACACIA, A.C. <https://orcid.org/0000-0002-2328-5438>

Francisco Martín Villarreal Solís, PhD in Management from Universidad Autónoma de San Luis Potosí, is a Full-time Professor at Universidad Juárez del Estado de Durango, School of Economics, Accounting and Management and is responsible for the Organization Theory Chapter of the Academy of Administrative Sciences ACACIA. <https://orcid.org/0000-0001-9251-5084>

Mariana Zerón Félix, PhD in Management from Universidad Autónoma de Tamaulipas, is a Full-time Professor at Universidad Autónoma de Tamaulipas, School of Commerce and Administration, Victoria Campus and is a Member of the National System of Researchers, Level I, and responsible for the Knowledge Management Chapter of the Academy of Administrative Sciences ACACIA, A.C. She is ANFECA Certified Teacher. <https://orcid.org/0000-0003-0584-6884>

Preface

For centuries past, particularly the present twenty-first, we have witnessed a variety of events that have pushed our planet to what we once thought was the limit. However, we had no idea what we would have to deal with when a new variant of a virus made its way across borders and turned into the very phenomenon we used to read about in history books: a pandemic. This book presents a variety of situations and topics presented in texts co-authored by renowned national and international academics under the coordination of Dr Sánchez Limón, President of the Academy of Administrative Sciences ACACIA; and Dr Saavedra García, President of the Research Commission of the Mexican Institute of Finance Executives - IMEF.

We are constantly receiving, consuming, and experiencing the effects of the pandemic whose prospective recovery I dare to call bleak and completely different from what we have had to deal with in previous global crises. In this sense, the five areas on which this research focusses offer a series of strategic factors to support the indispensable and necessary reinvention - from this year and onwards - of all organisations that contribute to our countries' society and economy. The key role that foreign trade, micro-, small-, and medium-sized enterprises (MSMEs), human capital, marketing, and business strategies play in the quest to create a more sustainable and inclusive world is undeniable. Ideally, we should all have been proactively focussing our actions for decades, prioritising our societies' survival. However, as the authors rightly point out, our country and region is made up of a population dependent on subsistence businesses that was already struggling with constant challenges, including the closing of borders and a subsequent reinforcement of the global economic crisis derived from the sudden transition to the virtual world.

In this respect, this work is intended to offer added value in view of such a transition and contributes to the efforts to diversify services and products that are undoubtedly underway. It also supports public awareness raising about the fact that any crisis requires the impact of our actions along the value chain to reach both the target audience of each of our sectors and society as a whole. These pages echo a clear unison of voices that - while recognising the difficult scenarios in terms of foreign investment, limited foreign trade, the impact of whether a service or product is a basic need, and our societies' affected purchasing power - also highlight the importance of access to and mastery of technology, as well as the relevance of the human factor. Finally, I note that, indirectly, through the perspective of the

economic and administrative sciences, this work brings to light just how negligent we have been of the impact suffered intensively by our population during the pandemic and the need to provide an innovative and empathetic response to it.

The impact of this work lies precisely in its attenuating approach to the complicated status quo and the joint work of the authors who, through different voices and perspectives, offer us a glimpse of the reality that the populations of Mexico and Latin America are experiencing in the field of management sciences. The work stands out for its focus on the voices of national and regional producers, the increasingly valued competitiveness, the indispensable value and understanding of human capital, the vital and necessary technology, and the understanding of the value of solidarity and responsibility towards society. I applaud the authors' imparting, throughout the research, of statistical data, methodologies, results, alternatives, and tools to improve our decision-making in light of today's 'new reality'. I hope you enjoy this as much as I have.

Dr Eduardo Ávalos Lira,
President of the Accrediting Council for Social,
Accounting, and Administrative Sciences in Latin America.

Presentation

COVID-19 has forced states and economic and social agents to propose solutions to the unforeseen and complex challenges of the pandemic. In this context, '*Research in Administrative Sciences Under COVID-19*' provides an exceptional scientific approach from different areas of the administration to analyse and propose appropriate measures that will effectively contribute to curbing the economic and social crisis triggered by the pandemic and recovering the 'normality' that everyone longs for.

The approach employed in this work is exemplary in terms of transferring the knowledge that universities must provide in order to contribute to public well-being and social progress. The studies it includes address this objective in a prompt and innovative spirit. Its proposals are based on the factual situation, its rationale and study, and are pragmatically projected so that they can be assessed and monitored. All the studies presented contribute to decision-making in public and private organisations for the design of economic and social reactivation policies that improve companies' competitiveness and employment in COVID-19 crisis.

The work has been systematised into three main sections (Companies and SMEs, Human Capital and Knowledge Management, and Marketing and Business Strategies), reflecting the meticulous planning that went into delivering the proposed results. My sincere congratulations to the coordinators of the scientific work for their approach to the topics addressed and for their comprehensive structure. The sequence of the different studies included is decisive in making decisions on how to overcome the pandemic, particularly considering its effects on micro-, small-, and medium-sized enterprises (MSMEs).

Accordingly, the study on Latin American MSMEs competitiveness under COVID-19 emphasises the commitment to the priority focus on the inclusive development of citizens in the closest regional environments in order to overcome vulnerability in terms of self-employment. The proposals made for strengthening the implementation of MSME policies and the design of the new programmes and practices presented will help to bolster the economy of the affected sectors through entrepreneurship and self-employment. These proposals should be supported as launching pads for job creation and social recognition.

In the economic and social situation described, research into the innovative and proactive practices adopted by subsistence businesses makes it possible to measure the effort made and its evaluation as a reference of opportunities to adopt new marketing and consumption habits. The reflections presented in the work

ensure the reinforcement and singularisation of certain sales lines that must be consolidated through diversification and the incorporation of new technologies as guarantees of future permanence.

Analysing the effects of COVID on the export sector makes it possible to measure the stability of national production and its safeguarding, while at the same time helping to detect and promote opportunities and niches for new products with the greatest potential in pandemic situations. This line of research offers new studies of particular reference for the adoption of reinforcement measures for the national industry.

In all economic decisions and policies, knowledge management is a determining factor for company competitiveness, which in turn has a direct impact on a region's labour and social framework. The multiple case study of knowledge management at UNAM and the responses to COVID reinforce the need to link the university to groups within society. The evaluation of these results must be decisive in modulating the mission and vision of a modern and competitive university at the service of social well-being. The direct transfer of knowledge management to companies in the shortest possible time is one of the university's main objectives at all times but particularly in such times of economic and social crisis.

The study of the impact of burnout on the intention to quit among university workers in Tamaulipas is of particular interest. It offers an avenue for further research on staff training and response to unforeseen situations, specifically in overcoming the negative emotional states that the pandemic can engender. In the same direction, the analysis and reflection on the factors that have an impact on the academic stress associated with teleworking under COVID-19 and its effects on students opens up a line of research of maximum interest to implement strategies to strengthen a teaching-learning process that can favour comprehensive training, taking into account the high levels of stress and job burnout that the obligatory nature of online training can cause.

Indeed, the obligatory use of technological procedures for work (teleworking or virtual training) can lead in certain cases to situations of psychosocial suffering that directly affect the mental health of today's students. The results obtained from the study on technostress in university students on academic performance demonstrate the need for an in-depth examination of the evolution of student behaviour and its direct effects on academic achievement, both from the perspective of the student and the teaching staff. We must not forget that excellence in the acquisition of competences and skills in university education is the effective guarantee for the effective transfer of knowledge to society.

The pandemic and ensuing confinement have automatically led to an expansion of e-commerce. This is clearly demonstrated by the study on the influence of e-commerce on consumption habits under COVID-19 in the City of Durango. This significant expansion of e-commerce in times of pandemic calls for further research on its direct effects on the consumer and on the business sector.

The public service nature of the proposed research questions the application of the design thinking methodology to promote the economic reactivation of start-ups. The application of this methodology appears to be useful as a guide to steer the re-opening and re-launching of enterprises.

This book concludes with a study of the effects of COVID-19 on corporate social responsibility. The literature review reveals that the pandemic has led to a greater understanding of socially responsible practices, which have been boosted by public policy actions with competitive advantages for companies. These favourable measures should continue to be encouraged to reinforce social responsibility at the core of business, particularly in the service of the most vulnerable.

In sum, as I mentioned at the beginning, *‘Research in Administrative Sciences Under COVID-19’* is a compilation of excellent scientific papers of immediate response of knowledge transfer from the University to contribute to citizen well-being and social progress. My sincere congratulations to the coordinators of the paper, Ms Mónica Lorena Sánchez Limón and Ms María Luisa Saavedra García, and to all the participants for the depth of their research and effective proposals to help overcome the economic and social crisis caused by COVID-19.

Dr José Luis Peña Alonso,
Professor of Finance and Taxation Law,
Universidad de Burgos, Spain

This page intentionally left blank

Introduction

*Mónica Lorena Sánchez Limón and
María Luisa Saavedra García*

The whole world is currently in the midst of a health, humanitarian, and economic crisis unlike any other in this century. It has brought activities to a standstill due to the voluntary or compulsory restrictions established in all countries. Given that the paralysis of productive activities and the contraction of demand augurs a slow recovery, there is great uncertainty as to how long the crisis will last and what prospects there are for recovery.

Faced with this scenario, the governments of all countries have had to adopt measures to combat the spread of COVID-19. This has had serious consequences for world economies, which have paralysed an important part of their production operations, starting with Asia, then Europe, followed by North America, Latin America, and the rest of the world. It has also resulted in border closures, leading to a worrying rise in unemployment with the inevitable fall in demand for goods and services. Indeed, it is estimated that the contraction in world output will be greater than in any past crisis since the Second World War and even greater than that recorded during the Great Depression, with recovery expected to be slow.

The Academy of Administrative Sciences ACACIA, A.C., in congruence with its vision of ‘Contributing to social progress by promoting excellence in scientific research and professional practice of those dedicated to the disciplines of Administration and related areas, both in Mexico and internationally’, presents this book in response to the context surrounding organisations under COVID-19 and the challenges of administration. This book is the product of the research efforts of 23 outstanding researchers belonging to 12 Mexican higher education institutions and 1 Latin American institution.

This book is also intended to help organisations prepare to deal with the ravages of the pandemic and provides information on how to do so through administrative practices. It is considered that the contribution of this work will be fundamental given that to date, there is no literature on the subject in the Mexican and Latin American contexts. The themes of this book have been organised into 10 chapters that deal with aspects related to companies, their competitiveness, focus, and export capacity under COVID-19. Others have developed themes on intellectual capital, burnout, stress, and technostress, as effects of the pandemic on organisations’ human capital. Finally, it addresses corporate social responsibility,

Research in Administrative Sciences under COVID-19, 1–2

Emerald Publishing Limited Howard House, Wagon Lane, Bingley BD16 1WA, UK

First published by ACACIA as *La Investigación en Ciencias Administrativas ante el COVID-19*, 2021

English language translation copyright © 2022 Emerald Publishing Limited.

This edition published under exclusive licence from ACACIA, by Emerald Publishing Limited.

doi:[10.1108/978-1-80262-297-320221001](https://doi.org/10.1108/978-1-80262-297-320221001)

e-commerce in times of COVID-19, and design thinking as a strategy for the economic reactivation of start-ups in Mexico under COVID-19.

We hope that this material will provide support to businesses, teachers, students, and researchers interested in understanding how the pandemic has impacted organisations in Mexico and Latin America. We are sure that its contribution will also support the development of new lines of research in this field.

We thank the national and international reviewers whose thoughtful comments enriched this work, the authors who were willing to write about this topic from their own perspective and field of knowledge, and CACECA (Consejo de Acreditación en la Enseñanza de la Contaduría y Administración [Council for Accreditation in the Teaching of Accounting and Administration]) and CACSLA (Consejo de Acreditación en Ciencias Sociales, Contables y Administrativas en la Educación Superior de Latinoamérica [Council for Accreditation in Social, Accounting and Administrative Sciences in Higher Education in Latin America]) for their commitment to disseminating science by agreeing to co-publish this book.

Dr Mónica Lorena Sánchez Limón
Universidad Autónoma de Tamaulipas
ACACIA President

Dr María Luisa Saavedra García
Universidad Nacional Autónoma de México
ACACIA Chapter Vice President

Part I

Companies and SMEs

This page intentionally left blank

Chapter 1

The Systemic Competitiveness of Latin American MSMEs Under COVID-19

María del Rosario Demuner Flores, María Luisa Saavedra García and Elsa Esther Choy Zevallos

Abstract

Competitiveness has become essential to business survival. Accordingly, the purpose of this chapter is to study the competitiveness of micro-, small-, and medium-sized enterprises (MSMEs) in Latin America under the systemic competitiveness model under COVID-19. Documentary research was conducted, based on reports from the Inter-American Development Bank, the Economic Commission for Latin America and the Caribbean, the World Bank, and the Organisation for Economic Co-operation and Development, among others. The main findings reveal an alarming deterioration at the macro, meso, and meta levels, which requires the design of public policies that consider the situation of MSMEs as essential for reducing poverty and unemployment affecting the region. Although MSMEs hold some advantages at the micro level, they need to receive direct support to enable them to stay afloat and make productive and technological investments.

Keywords: Systemic competitiveness; MSME; COVID-19; enterprises; ECLAC; public policies

Introduction

The Organisation for Economic Co-operation and Development (OECD, 2019d) states that the predominance of micro-, small-, and medium-sized enterprises (MSMEs) in Latin America (LA) makes them key actors in building more inclusive and sustainable growth, mitigating economic impacts and improving social

Research in Administrative Sciences under COVID-19, 5–30

Emerald Publishing Limited Howard House, Wagon Lane, Bingley BD16 1WA, UK

First published by ACACIA as *La Investigación en Ciencias Administrativas ante el COVID-19*, 2021

English language translation copyright © 2022 Emerald Publishing Limited.

This edition published under exclusive licence from ACACIA, by Emerald Publishing Limited.
doi:[10.1108/978-1-80262-297-320221002](https://doi.org/10.1108/978-1-80262-297-320221002)

cohesion. Thus, when seeking to improve the standard of living and quality of life of the region's inhabitants by creating jobs, and reducing poverty and inequality, the promotion of MSMEs is essential, and they should be established as a priority item on region's agenda; hence, the importance of studying them.

In this chapter, business competitiveness is approached from the Economic Commission for Latin America and the Caribbean (ECLAC) systemic competitiveness model applied to MSMEs, which integrates four spheres that condition and model their performance (Esser, Hillebrand, Messner, & Meyer, 1996; Saavedra, 2012). The macro level includes economic, foreign, fiscal, monetary, trade, exchange, and budgetary policies, among others, that enable the allocation of state resources to improve citizens' quality of life. The meso level integrates the set of strategies for the efficient development of the environment, such as physical and institutional infrastructure, specific education policies, technology, and local industrial support policies, among others. The meta level includes the design and monitoring of political management reforms to improve the functioning and provide joint solutions to problems between institutions, government, business, and intermediate organisations. Finally, the micro level includes the internal management processes that drive business strategies aimed at leveraging resources and capabilities to succeed, generate profits, and sustain competitive advantage.

According to this model, there needs to be a holistic interaction that favours business competitiveness. Thus, the objective of this chapter is to analyse each of these levels in the context of the Latin American MSME - in the new context of the COVID-19 pandemic - in order to reach a conclusion that reveals a firm's competitive position.

1.1. Theoretical Framework

1.1.1. *The Systemic Competitiveness Model*

The systemic competitiveness model proposed by ECLAC was adapted for empirical application to Latin American MSMEs by Saavedra (2012). Defining that '... the competitiveness of a firm depends on productivity, profitability, competitive position, internal and external market share, inter-firm relations, sector and regional infrastructure ...', thus justifying the use of the model to determine the competitiveness of an MSME.

This is in line with Esser et al. (1996), who state that business competitiveness is not achieved automatically by improving the macro context, nor is it achieved exclusively on the basis of the company's resources at the micro level. Rather, it requires the establishment of a complex and dynamic pattern of interaction between the state, enterprises, intermediary organisations, and the integration of society into the productive dynamic. Hence, a competitiveness-oriented incentive mechanism is needed to encourage enterprises to implement continuous learning processes and to increase their effectiveness and efficiency, while at the same time increasing productivity.

It is clear that this concept is characterised by the fact that successful industrial development is not only achieved through a production function at the micro level, or stable macroeconomic conditions at the macro level, but also through

the establishment and operation of specific measures by government (industrial infrastructure development) and private development organisations geared towards strengthening enterprise competitiveness (meso level). Thus, the capacity to link these policies is a function of a set of political and economic structures that, aligned with socio-cultural factors and basic patterns for the organisation of a society (target level), will be able to help boost the competitiveness of MSMEs (Naciones Unidas-CEPAL, 2001). These four levels are briefly explained below:

- (1) Macro level: fiscal, monetary, trade, exchange rate, budgetary, and competition policies, which enable an efficient allocation of resources and, at the same time, require greater efficiency from companies.
- (2) Meso level: environmental efficiency, factor markets, physical and institutional infrastructure. And, in general, specific policies for the creation of competitive advantages, such as educational, technological, environmental, and other policies.
- (3) Target or strategic level: political structure and development-oriented economy, competitive structure of the economy, strategic visions, and national development plans.
- (4) Micro level: processes within the company to create competitive advantage. Companies' management capacity, their business strategies, management, and innovation. In other words, the resources available to the company to meet its main goal.

According to this model, it is the interaction between these four levels that drives business competitiveness. This model has been applied to the MSMEs in LA considering their regions or states, as illustrated by two studies coordinated by Saavedra. The first (Saavedra, 2014a) involved 69 researchers from 18 universities in 3 countries (Colombia, Venezuela, and Mexico) and was supported by the Latin American Association of Faculties and Schools of Accounting and Administration. The second (Saavedra, 2014b) involved six researchers from three universities in Mexico City. The model can also be applied specifically to the study of a business sector, as in the work of Saavedra and Milla (2015), where it was applied specifically to the study of industrial MSMEs in Querétaro, Mexico, and in the study by Saavedra and Bermeo (2017), in which they applied this model to wood furniture manufacturing companies in Azuay, Ecuador. This model has been replicated in most Latin American countries, as demonstrated by the fact that the methodology published by Saavedra (2012) has been referenced more than 300 times, according to the Google Scholar citation report. As previously established, in this research, the model will be applied to the study of the competitiveness of Latin American MSMEs under COVID-19.

1.2. Method

Desk-based research was conducted to collect information from secondary sources published on the web repositories of international organisations, including the OECD, the Development Bank of Latin America (CAF), Banco de España,

the Inter-American Development Bank, the United Nations, the ECLAC, the International Labour Organisation (ILO), and the World Bank Group. Previous research findings on the different aspects affecting MSMEs and their competitiveness were also collected. Subsequently, all the bibliographic material recovered was analysed, and the themes were grouped considering the levels and variables contained in each level. This was done in accordance with the ECLAC systemic competitiveness approach, following the methodology of [Saavedra \(2012\)](#). Finally, the historical narrative method was used to describe the situation of the Latin American MSME, framed within the systemic competitiveness model described in the previous section.

1.3. Development: The Systemic Competitiveness of Latin American MSMEs Under COVID-19

This section describes the situation of Latin American MSMEs in the context of COVID-19, considering the variables contained in the macro, meso, meta, and micro levels, in accordance with the ECLAC model and [Saavedra's methodology \(2012\)](#). The variant included in the analysis and narrative of the current situation is that at the micro level, data are not collected from MSMEs, but their situation is described based on a desk review.

1.3.1. Competitiveness at Macro Level

The macroeconomic environment significantly affects the competitiveness of MSMEs, so the most important thing is for the macroeconomic context to remain stable (i.e., that inflation, budget deficit, exchange rates, and external debt are controllable, and that the rules of the game are not permanently altered; this is the only way to generate security for investment) and for macroeconomic policy to send clear and unequivocal signals to convey to companies that they must approach the level of efficiency that is common in the international sphere. Promote a trade policy that gradually reduces import barriers and a competition policy that plays a significant role in preventing the creation of monopolistic situations ([Esser et al., 1996](#); [Saavedra & Saavedra, 2015](#)).

1.3.1.1. Economic Policy. MSMEs in LA are a major presence. The countries of the region have recognised their relevant role and have created instruments and support programmes to promote them. The importance of MSMEs lies in the fact that they represent 99.5% of companies in LA, with smaller companies being the most prevalent in all sectors, especially in the commerce sector, where they account for 92% of the total ([OECD, 2019d](#)).

In the 2010-2013 period, some countries in Latin America and the Caribbean (LAC) showed high rates of economic growth. Between 2014 and 2016, there was a stagnation, whereby gross domestic product (GDP) rates were negative even for Argentina and Ecuador; in 2017, growth was resumed with a real GDP of 1.3% on average for this region ([OECD, 2019d](#)) ([Table 1.1](#)).

Forecasts for 2020 showed that LAC would experience uncertainty as a result of external factors that would slow down their growth given the political situation