

# SELECTED ABSTRACTS AND PAPERS

FROM THE LATIN AMERICAN RESEARCH CONSORTIUM

DEANS' WORKSHOP

*Social responsibility and Entrepreneurship*

March 25-27, 2009

## TULANE UNIVERSITY

6823 St. Charles Avenue

New Orleans, LA

70118 504-865-5000

[www.tulane.edu](http://www.tulane.edu)

## UNIVERSIDAD ICESI

Calle 18 No. 122-135, AA. 25608

(572) 5552334

Cali, Colombia

[www.icesi.edu.co](http://www.icesi.edu.co)



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## WELCOMING REMARKS

JOHN TRAPANI, DIRECTOR OF GOLDRING INSTITUTE FOR INTERNATIONAL BUSINESS<sup>1</sup>,  
A. B. FREEMAN TULANE UNIVERSITY, NEW ORLEANS, LA

Good morning and welcome to New Orleans, Tulane University, and the Freeman School of Business. We are very pleased to host the 9th meeting of Latin American Research Consortium meetings this year here at Tulane and we are happy to have such a strong show of support for the program through your attendance. We want to thank you all for your participation. This year we have 16 schools participating, about 70 people in attendance, and 32 research papers to be presented. This will be a record year of us by these measures of activity.

Let me introduce several special guests and first time participants of our meeting.

From the academic community:

- Alfredo Arahuetes, Dean, and Robert Robinson, Associate Dean, ICADE, Madrid, Spain
- Carlos Basurto, Dean of Business, UDEM, Monterrey, Mexico
- Diego Cardona, Dean of Business, U. del Norte, Barranquilla, Colombia

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1. *The Goldring Institute for International Business* was founded at Tulane University in 1991 through the generosity of the Goldring Family Foundation. The Goldring Institute's purpose is to promote and develop the research and academic programs of the A.B. Freeman School of Business which are related to international business. The Institute is divided into three centers: Center for Latin American Business Studies, Center for Asian Business Studies, and the Center for Freeman International Programs. The programs of the Institute are to serve the educational needs of Tulane students to understand the opportunities and challenges of global business, to support our faculty's global experience through international travel, teaching and research, and to position the school as a leader in management education around the world.

- Irineu Gianesi, Associate Dean, IBMEC Sao Paulo, Sao Paulo, Brazil
- Felipe Morande, Dean of Business, U. Chile, Santiago Chile
- Marcelo Paladino, Dean of Business, IAE, U. Astral, Buenos Aires, Argentina
- Jose Pereyra, Professor of Management, Centrum (Catolica de Peru), Lima, Peru
- Julia Sagebien, Associate Dean, Universidad Puerto Rico, Puerto Rico

From the business community

Alejandra Claveria, Journalist, America Economía, Santiago Chile

Pres Kabacoff, CEO HRI Properties, New Orleans, LA

Henrique Vollmer, Director, Santa Teresa, Venezuela

The LARC was founded in 1995 to support Tulane's faculty development PhD program initiatives for the region. Its purpose has been, and remains today, to encourage scholarly research on markets and business institutions in Latin America. We have established a number of partnerships with excellent business schools in the region which has made this effort a great success.

Tulane now has over 60 PhD graduates from this program, working in Latin America as teachers, research scholars and administrators. In addition, there is another 35 in the process of completing their PhD degrees from Tulane.

The research workshops for our meetings this week hosting the presentation of 32 papers on topics related to Latin American markets and business institutions is another major indicator of our success in the encouragement and nurturing of scholarship in the region.

The Dean's workshop was added to the LARC meetings three years ago with the purpose of providing a program for deans from our partner institutions to meet and share their program initiatives and discuss their strategic challenges.

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While many of us compete in various aspects of our programs and markets, the LARC and the Dean's workshop are intended to provide a forum for collaboration. The goal of this collaboration is the advancement of management education and scholarly research in business for the region.

This is the 3rd meeting of the Dean's Workshop and Tulane is very proud to be a part of this effort. The topic for the Dean's Workshop is social responsibility, social innovation, and the development of curricula of business schools. This has been an issue for business schools as long as I have been a faculty member (some 30 plus years). However, it never seems to be resolved as to the best methods to prepare our students to accept this responsibility even though it is encouraged by dean's and the regulatory bodies such as AACSB. Hopefully our distinguished set of speakers this morning and the dean's panels will offer some creative solutions.

Thanks for being here and supporting the LARC and Dean's Workshop program and I hope that you have an enjoyable and productive two days with us here at Tulane.

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## NOTE FROM THE DEAN OF THE SCHOOL OF BUSINESS AND ECONOMICS AT UNIVERSIDAD ICESI

HECTOR OCHOA, UNIVERSIDAD ICESI, COLOMBIA

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Once again Icesi University and Tulane University have come together in an initiative to release the most important papers presented within the frame of the meeting of the Latin American Research Consortium (LARC) held in New Orleans, USA, from March 25 to March 27, 2009.

This time the publication will not only contain abstracts of papers submitted, but also feature a complete version of the most interesting papers submitted at the meeting. This is the reason that from now onwards the publication will be titled “Selected Abstracts and Papers from the Latin American Research Consortium”, and not just Selected Abstracts as titled in 2008.

The core subject of the meeting was social responsibility and entrepreneurship from the perspectives of education, finance, and business. As in 2008, the agenda (see Attachments) for this event was designed seeking to drive discussions about these three issues. To this end, there were two different types of sessions, i.e. a workshop aimed at deans (dean’s workshop) and concurrent sessions with the participation of distinguished researchers and deans from Latin America. These sessions were broken down by each theme subject in finance and business. This allowed attendants to select the subject in which they were interested.

This publication is organized as follows. Firstly, there is a discussion of four presentations by deans from different schools of management and economics in Latin American. This section is followed by seven full-length papers; three which were presented at the plenary business session and four from the

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plenary on finance. Thirdly, there is a discussion of three selected paper abstracts, one on business and two on finance. At the end of the publication there is a description of the three-day agenda for the meeting.

The presentations by the four deans from management schools in Latin America provide evidence of the need to include the topics of social responsibility and entrepreneurship in the syllabi of management and economics programs in Latin American universities. In this respect, they pointed out the social responsibility of universities for teaching and raising awareness of these issues among the students who will become the future leaders in their communities.

The selected documents section provides a review of three documents in the field of business. The paper written by Hanna Riley Bowles, Linda Babcock, and Lei Lai from the Universities of Harvard, Carnegie Mellon, and Tulane, respectively, discusses the social implications of high expectations from negotiation processes. It is followed by a paper by Julio César Alonso and Ana María Arboleda from Icesi University which discusses “me-too” type products aiming at determining whether the packaging design of these products leads to confusing consumers in purchasing. Then, Silvio Borrero from Icesi University discusses how consumers in current society have become more concerned with materialism and consumerism than with the happiness derived from purchasing.

On the other hand, the selected papers section on finance makes interesting contributions to the approaches to the study of economics and finance in the Latin American context. The paper by Mauricio Arcos, Julián Benavides, and Luis Berggrun at Icesi University, for example, discusses optimal portfolio allocations based on stock indexes in Latin America. Similarly, the paper by Christian Espinosa and Carlos Maquieria from Santo Tomás University in Chile discusses an ideal capital structure for developing countries and uses the Latin American case as an illustration.

It is followed by two papers specialized in a country. To do this, Luis Berggrun and Fernando Jaramillo from Icesi University conduct a review of pension funds in Colombia, and Cándido Pérez, Ana Maldonado, and Juan Asuaje from IESA provide an analysis of the bond market in Venezuela.

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Lastly, the section of paper abstracts presented at the meeting shows the work by Ernesto Blanco from Tulane University which explores different kinds of social and psychological behaviors applicable to business. It also contains an abstract of two papers submitted in the financial area, i.e. one by Julio César Alonso and Mauricio Arcos regarding the spending of the Colombian government, and the other by Eric Fernando Rodríguez about financial difficulties and the bankruptcy laws in Colombia.

We hope that this document will reflect the current trends in Latin America in terms of research and education from the standpoint of social responsibility and entrepreneurship. At Icesi University and Tulane University we are committed to continuing to disseminate these kinds of events which provide important contributions to the region.

A decision has also been made to publish Selected Abstracts and Paper from the Latin American Research Consortium as a supplement to the academic journal at Icesi University titled ***Estudios Gerenciales*** for the purpose of using the national and international networks of libraries and researchers of which the journal is a member, thus allowing us to accomplish the objective of disseminating knowledge. We encourage our readers to send us their comments and concerns either at the following e-mail address: [estgerencial@icesi.edu.co](mailto:estgerencial@icesi.edu.co) or at any of the e-mail addresses of the following individuals responsible for gathering the papers selected for this issue Jorge Alba García ([jalbagar@tulane.edu.co](mailto:jalbagar@tulane.edu.co)) or William A. Mindak ([wmindak@tulane.edu](mailto:wmindak@tulane.edu)), both at Tulane University.

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## MENSAJE DEL DECANO DE LA FACULTAD DE CIENCIAS ADMINISTRATIVAS Y ECONÓMICAS DE LA UNIVERSIDAD ICESI

HÉCTOR OCHOA, DECANO FACULTAD DE CIENCIAS ADMINISTRATIVAS Y ECONÓMICAS,  
UNIVERSIDAD ICESI, COLOMBIA

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Una vez más la Universidad Icesi y Tulane University se han unido para dar paso a la publicación de los documentos más relevantes presentados en el marco del Consorcio Latinoamericano de Investigación (LARC, por sus siglas en inglés) realizado los pasados 25 a 27 de marzo de 2009 en New Orleans (Estados Unidos).

En esta oportunidad la publicación dará lugar no solo a los resúmenes de artículos presentados para consideración (abstracts), sino que también dará lugar a los artículos completos más interesantes que fueron presentados durante el consorcio. Por esta razón, en adelante la publicación pasará a llamarse **Selected Abstracts and Papers from the Latin American Research Consortium**, y no solo **Selected Abstracts**, título que se le dio en 2008.

El tema central del consorcio fue la responsabilidad social y el emprendimiento, analizado desde el punto de vista de la educación, las finanzas y los negocios. Al igual que en 2008, el programa (ver Anexos), se diseñó buscando dar pie a estas tres temáticas, para lo cual se contó con dos tipos de sesiones. La primera, el taller para los decanos (Dean's Workshop) y en segundo lugar, las sesiones simultáneas, en las cuales participaron importantes investigadores y decanos de Latinoamérica. Estas sesiones fueron divididas por área temática en finanzas y negocios, de tal forma que cada participante escogía la sesión temática en la cual estaba interesado en participar.

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Esta publicación se organiza de la siguiente manera: en primer lugar, se expondrán cuatro presentaciones realizadas por decanos de escuelas de administración y economía en Latinoamérica. En segundo lugar, se presentarán siete artículos completos, tres presentados en la sesión plenaria de negocios, y cuatro en la sesión plenaria en finanzas. En tercer lugar, se presentan tres resúmenes de artículos seleccionados, uno en negocios y dos en finanzas. Finalmente, se da a conocer el programa llevado a cabo durante los tres días del Consorcio.

Las exposiciones de los cuatro decanos de facultades de administración en Latinoamérica, dan cuenta de la necesidad de incluir el tema de responsabilidad social y emprendimiento en los programas de administración y economía en las universidades de Latinoamérica; al respecto, señalan la responsabilidad social de la universidad en la enseñanza y apropiación de estos temas por parte de los estudiantes como futuros líderes de la comunidad.

En la sección de documentos seleccionados, se presentan tres documentos en el área de los negocios. El documento de Hanna Riley Bowles, Linda Babcock y Lei Lai, de las universidades de Harvard, Carnegie Mellon y Tulane, respectivamente, habla sobre las implicaciones sociales de las grandes aspiraciones en los procesos de negociación. Seguidamente, Julio César Alonso y Ana María Arboleda de la Universidad Icesi, hablan sobre los productos tipo “me too”, buscando determinar si el diseño de los empaques de estos conllevan o no a la confusión en la compra del consumidor. En tercer lugar, Silvio Borrero de la Universidad Icesi, habla sobre cómo la sociedad actual se ha preocupado por el materialismo y el consumo más que por la felicidad que otorga la compra al consumidor.

Por otro lado, la sección de documentos seleccionados en el área financiera, aporta interesantes formas de estudiar la economía y las finanzas en el contexto de Latinoamérica. Por ejemplo, en el documento de Mauricio Arcos, Julián Benavides y Luis Berggrun de la Universidad Icesi, se habla de las asignaciones óptimas de portafolio según los índices de las acciones de Latinoamérica. Igualmente, en el documento de Christian Espinosa y Carlos Maquieria de la Universidad Santo Tomás de Chile, se discute cómo debería ser la estructura de capital en países en vía de desarrollo, para lo cual toma el

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caso de América Latina. Luego, se presentan dos documentos especializados en un solo país, para lo cual Luis Berggrun y Fernando Jaramillo de la Universidad Icesi hacen un estudio de los fondos de pensiones en Colombia; y Cándido Pérez, Ana Maldonado y Juan Asuaje de IESA, hacen un estudio del mercado de bonos en Venezuela.

Finalmente, en la sección de resúmenes de artículos presentados para el Consorcio, se muestra el trabajo de Ernesto Blanco de Tulane University, en donde este explora diferentes comportamientos psicológicos y sociales que son aplicables a los negocios. Igualmente, se presenta el resumen de dos trabajos presentados en el área financiera. En primer lugar, el de Julio César Alonso y Mauricio Arcos sobre los gastos del gobierno colombiano; y en segundo lugar, el de Eric Fernando Rodríguez sobre las dificultades financieras y las leyes de quiebra en Colombia.

De esta manera, esperamos que este documento dé cuenta de las tendencias actuales en Latinoamérica en investigación y en educación desde el punto de vista de la responsabilidad social y el emprendimiento. En la Universidad Icesi y en Tulane University, estamos comprometidos a continuar con la divulgación de este tipo de eventos que hacen importantes contribuciones a la región.

Igualmente, se ha decidido la publicación de **Selected Abstracts and Paper from the Latin American Research Consortium**, como un suplemento a la revista académica de la Universidad Icesi, *Estudios Gerenciales*, con la intención de utilizar las redes de bibliotecas e investigadores nacionales e internacionales a las que esta revista pertenece y con lo cual se logra el objetivo de divulgar conocimiento. Invitamos a los lectores a enviarnos sus comentarios e inquietudes a: [estgerencial@icesi.edu.co](mailto:estgerencial@icesi.edu.co); o a los correos de los compiladores de los documentos seleccionados para esta edición: Jorge Alba García ([jalbagar@tulane.edu.co](mailto:jalbagar@tulane.edu.co)) o William A. Mindak ([wmindak@tulane.edu](mailto:wmindak@tulane.edu)), ambos de Tulane University.

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DEAN'S WORKSHOP

**Challenge or social responsibilities and entrepreneurship  
to business schools**

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## SOCIAL ENTREPRENEURSHIP IN BUSINESS SCHOOL CURRICULA AT UNIVERSIDAD DE LOS ANDES SCHOOL OF MANAGEMENT

MARIA LORENA GUTIERREZ, DEAN, SCHOOL OF BUSINESS, UNIVERSIDAD DE LOS ANDES, COLOMBIA  
mlg@adm.uniandes.edu.co

THIS WORK WAS PRESENTED AT THE LATIN AMERICAN RESEARCH CONSORTIUM AND DEANS  
WORKSHOP (LARC), NEW ORLEANS, LA, UNITED STATES  
MARCH, 2009

Good morning. First of all I would like to thank John Trapani and Dean Angelo DeNisi for inviting me to participate in the Dean's Workshop and talk about Social Entrepreneurship in Business Schools Curricula. In the next 15 minutes I will share with you how the Universidad de los Andes School of Management has incorporated, in the past years, the subject of social entrepreneurship in all of our main activities.

I'm going to start by explaining what we understand for social entrepreneurship, as a consequence of the process that the School underwent in order to include these issues in our curricula. I will also emphasize on the overall results and achievements, as well as our challenges for the future.

**At the School, we prefer to talk about social entrepreneurship, because we consider that this** concept is much broader than social responsibility.

We understand social entrepreneurship as a *group of activities oriented, intentionally and explicitly, to generate social value, not as a result of economic activity, and regardless of the legal or organizational structure*. For us, social value creation cannot be seen as an externality. It must go beyond what is established or considered as law or legal.

**For us, social entrepreneurship could be created by different organizational dynamics.** In first place, it could be developed through private initiatives that aim at creating value for each organization – this is Corporate Social Responsibility. On the other hand, you have the public management or initiatives and policies of the public sector. Finally you have social initiatives developed through third sector or non for profit organizations, which represent the most traditional mechanism for creating social initiatives. I would like to emphasize that alliances created between private companies, NGOs and the public sector are clearly the most successful examples and the most innovative way of creating major social impact.

**Related to Corporate Social Responsibility,** innovation is essential, and it's made possible through different activities that help create a new demand by: avoiding competition, shaping a responsible consumer, increasing the demand of low income consumers, or creating new associations with different communities.

**One of our main concerns as a School of Management regarding social responsibility is that, as the business world began to talk about it, it became a fashion or craze.** Since the nineties a strong effort began to foster corporate initiatives that answer to social demands and take advantage of opportunities. The misunderstanding is not new: Votaw in 1972 said *“Corporate social responsibility means something, but not always the same thing to everybody.”*

Actually, given its current momentum, a series of myths about Corporate Social Responsibility were developed. For example:

- With respect to ethical consumers and responsible consumption there is a big difference between the current discourse and the actual decisions made by the consumer.
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- Also, competition between companies to become ethical is constant and has created unfortunate outcomes that aim at hiding unethical behaviors. This is the case of increased effectiveness to hide irresponsible behaviors, or benefit from a confusing image to earn rights and pay fewer taxes.

**But, what are the real motivations for organizations or for us as Business Schools' leaders to generate social entrepreneurship and move away from these myths?**

To answer this, let me mention Emerson's and Twersky's (1996) concept which is useful for understanding the real motivations of organizations which can be either altruistic or utilitarian. Research has shown that those organizations that focus their efforts on altruism and shift towards the economic side, or vice versa, are able to attain mixed motivations in their different initiatives. When both social and economic motivations are integrated, the maximum level of sustainability is achieved.

**Motivations in organizations are driven by altruism** (based on tradition, religious values, new visions and roles, and are very common in family businesses) or by utilitarianism (based on risk management and competitive advantage, common in Multinational companies). It is possible to identify which motivation prevails. In general, when the owner continues being the president or manager of the company, altruism prevails, but when companies are driven by business managers, the economic side is the key driver (Milton Friedman's view). As mentioned earlier, the objective is to find the best way to integrate these motivations in order to create both economic and social value.

**In this sense, organizations and business schools** must focus on developing a strategy to create social value. It can be created through different mechanisms such as (i) access barriers to different population groups. This is the case of Colcerámica a Colombian tile company that has shifted its focus towards low level consumers. (ii) Identifying weakened and voiceless populations (for example working with population groups living in isolated regions in Colombia) that could be affected by our actions; (iii) and by avoiding unwanted effects on businesses.

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**In addition to a social value creation strategy, a formal structure must be incorporated. This figure shows how social initiatives can be structured within an organization in order to create value.** There are different mechanisms which range between social intrapreneurship and alliances. In the first case, generally work is done within the Company with its same structure, or having its internal structure modified. In other cases a Foundation is created to support these initiatives. In the case of alliances, a Company works closely with Associations or with other types of actors such as the Government, or NGOs.

**It's also important to evaluate and assess the scope of organizations social activities.** In order to do so, the following tool can be used. This matrix assesses the different stakeholders of an organization and analyzes the scope of their different social initiatives. The matrix shows, if they only comply with the legal issues or if they go beyond them, fulfilling social expectations or being much more innovative at the business and the society level.

**Now I will talk about how social entrepreneurship is present in our school activities.**

Uniandes' School of Management created a Center: IESO (Social Enterprise Initiative) since its early beginnings in 2001. This centre and other initiatives have brought about some key changes and lessons that, at different levels, have transformed the way we work and teach. These changes have been reinforced by different activities and projects our School has undertaken during the past years. Among the most important are the different accreditation processes we have been involved in, as well as some basic institutional changes that we have decided to engage in, such as the School's Strategic Plan and other initiatives.

As part of this plan we made a clear decision towards redefining our mission and focusing our interests and commitment towards the development of social responsibility and socially responsible citizens among our School. By explicitly introducing these topics into our mission, the School has taken a key political and strategic decision: to promote social responsibility and sustainability as key components of the "Management Equation". Today we have a clear focus

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and direction on social enterprise research and teaching as an integral part of our daily actions.

**Our mission statement** has clearly driven our school towards many changes and new challenges. This endeavor is particularly relevant for Colombia which, as many of you know, suffers severe social, economic and political problems. We understand it is our responsibility to respond to these enormous challenges.

**Within our School**, the IESO Center has made an important effort to foster new academic and teaching proposals as well as attracting and committing Faculty members from different functional areas to work in Social Entrepreneurship topics. This attempt has been instrumental to develop joint research. It has demonstrated the feasibility of generating high quality research products and important publications of different sort. In this regard, IESO has been particularly successful. In the past couple of years 24 out of 63 Faculty members have participated in different types of activities such as joint research projects, teaching cases development and use (in the areas of Finance, Marketing, Logistics and Strategy), and Participant-Centered Teaching Workshops.

Important efforts have been made to integrate Social Entrepreneurship and Responsible Management topics as part of the curriculum in our Undergraduate and Graduate programs. Both elective and compulsory courses have been designed and introduced in the programs. Our school has also made an effort to help students understand the importance of social engagement, by promoting involvement in research projects, as well as participation in business plan competitions such as Social Ventures.

Our aim is to work closely with students, to raise awareness and to help them understand and see the relevance and advantages of social responsibility and social entrepreneurship.

**Following, it's important to understand how the School incorporates social entrepreneurship in the curriculum. One example is the way in which we have approached the topics of sustainability at the School by developing a Master in Environmental Management.**

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Environmental issues are pressing the world, but particularly in Colombia and Latin America. Colombia is the third country in the planet with most biodiversity and possesses ecosystems which are critical to the well-being of its population and the world, especially, the Amazon and Andean region. Issues such as climate change, biodiversity, air quality and water degradation, pose challenges for managers and leaders in the corporate, non-for-profit and public organizations.

Our School has identified environmental management as a key factor given: Colombia's strategic environmental competitive advantages; its location; and its strong environmental institutions and capacities. Another interesting example is the involvement of the School in The National Environmental Forum, an alliance between eight organizations, 7 environmental NGOs and our School. This is a leading platform focused on the evaluation and discussion of the environmental policy in Colombia. The forum is led by Manuel Rodriguez, full professor of our School. They organize seminars and the publication of policy papers and other references.

**Before I finish my intervention, I would like to reiterate our school multidisciplinary approach to social entrepreneurship that builds upon the research-teaching-service model.** Following I will present some of the key achievements of this model:

- **Development of 3 SEKN Research Cycles.**
- Enhancement of Research at a national level on a variety of topics.
- Advance in research output represented by books, chapters in books, articles and teaching cases.

**Creation of courses at the undergraduate**, graduate and executive education level. For example: At the Undergraduate program, we have the courses of: Social Responsibility Workshop; International Cooperation; Capacity Building for Nonprofits and Innovative and Responsible Management. At the Executive Education level, we offer: Society and Competitiveness, NPO Boards, and Marketing and Finance for NPO.

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**Development of different projects** and consulting activities with universities, as well as for profit and non for profit organizations. Some examples are: CSR meetings and workshops (98 businesses), support for social entrepreneurs (61 leaders)

**In general, we've been working on building bridges between our School and different stakeholders such as regional universities, companies, business associations, private foundations, non-governmental organizations, community-based organizations and social entrepreneurs.**

By attempting to transform different social contexts we have also learned, through our own experience, how to best help business and civil society organizations realize and improve the impacts they have on society. For instance, during the last two years we developed a Program for the Institutional Strengthening of Civil Society Organizations. This Program is a coherent effort to put together our previous experiences in different Executive Education Workshops. Another very important aspect that I must highlight is our work with other universities in Colombia and abroad in order to increase the impact of working in the field of Social Enterprise.

**As Dean of Uniandes School of Management** it is clear for me that the challenges ahead are still enormous. Let me mention a few of them:

- Consolidating networking opportunities with universities and organizations to go beyond training and support
- Assure that social responsibility remains a transversal issue in programs' curricula.
- Increase the number of both research and teaching cases in social entrepreneurship.
- To Consolidate UASM's regional positioning: social entrepreneurship and environmental management as differentiating factors of the School

Business Schools from all over the world are engaged in a challenging and relevant endeavor: strengthening their role as breeders of future business leaders. Social problems have attained global scale and we must become active part of the solution.

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## SOCIAL RESPONSIBILITY AND THE CURRICULUM: INITIATIVES AT UDEM –UNIVERSIDAD DE MONTERREY

ANTONIO JOSÉ DIECK-ASSAD, PH.D., UNIVERSIDAD DE MONTERREY, MEXICO  
ajdieck@udem.edu.mx

CARLOS E. BASURTO MEZA, PH.D., UNIVERSIDAD DE MONTERREY, MÉXICO  
cbasurto@udem.edu.mx

THIS WORK WAS PRESENTED AT THE LATIN AMERICAN RESEARCH CONSORTIUM AND DEANS  
WORKSHOP (LARC), NEW ORLEANS, LA, UNITED STATES  
MARCH, 2009

### **Abstract**

The Universidad de Monterrey (UDEM) is a Mexican academic institution with 40 years of experience in developing active change agents that have a social impact under an educational model that fosters a holistic development. UDEM's mission emphasizes its commitment to disseminate relevant knowledge, to have an active role in solving society's central problems in order to contribute to the country's innovative and sustainable growth. Part of UDEM's philosophy is to build up programs which aim to have a competitive country in the international arena, for that purpose the institution must bring into being skilled individuals willing to participate in their collectivity. It comes

natural to the university community, due to its catholic values ideology, to serve others and have a disposition to look for everyone's well being.

The UDEM has designed among others three main strategies to achieve its goals, which go in three main streams of action: applied research, business practice and educational models. To put them into practice, the university has established diverse centers like the Center of Well Being Studies and the Small Business Incubation and Development Center; all of them under the umbrella of a holistic custom-made educational model, the Personalized Educational Plan. Although the Personalized Educational Plan is still in its initial implementation, considering the global business context, UDEM has already being seen the results from their efforts in promoting social value, providing to its society committed individuals who take an active and responsible role in their community.

## **Introduction**

The social and business environments in general, have enthusiastically adopted "Social Responsibility" at the different organizations worldwide. In Universidad de Monterrey (UDEM), it represents an ethical dimension which is to be used in a visionary and practical basis. At the present time, there are several initiatives and resources to promote this element; business schools include seminars and corporations use it for rankings of good citizenship behavior, among others. The idea has only recently been discussed by academicians and practitioners, in order to come up with a definition of the concept and its implications.

Social Responsibility in general, is defined as the moment in which an organization becomes aware of its environment and its role in it. It also entails the well being of all internal and external beneficiaries, going for more than just pure altruism (Vallaey, 2004).

Social Responsibility for the university demands a holistic vision to link the different elements of an academic institution in order to have a project which promotes:

1. Ethical principles,
  2. Fair and sustainable social development,
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3. Responsible knowledge production and transmission,
4. Develop students to become professional and committed citizens.

As a result, university and society have to consider breaking old paradigms and developing a new contract. A contract that envisions strategies in four areas; the curricula (which is the technical deliverable knowledge?), teaching methodology and the faculty culture (How do you deliver it?), the university community (in which environment is transmitted?) and the social and community interaction (How do the university represent themselves in delivering it?) what academics have named the social value.

The purpose of this article is to describe part of UDEM's initiatives and strategies aimed to society to enhance, teach, implement and promote social responsible behavior. In particular, three relevant activities are described in general terms: the Quality of Life Index, the Social Entrepreneurship Model and the Personalized Educational Plan.

### **The Universidad de Monterrey**

The Universidad de Monterrey (UDEM) stands out as a model of liberal arts education. Its main idea is that education does not only consist of the technical learning process of knowledge, but should also seek the comprehensive and holistic development of the human being (Marist International Education Commission, 1995 – 1998).

The UDEM was founded in 1969, by a group of religious congregations with a deep tradition of more than fifty years of experience in education at Monterrey N. L., Mexico. Today UDEM's community conform a population of 10,717 students and 597 of faculty; 95% of their total students population are full-time students, 38% of all students receive some type of financial aid. UDEM offers 35 undergraduate programs, 10 graduate programs and 21 specializations; in addition, the university offers a broad number of continuing education programs. The University encourages cultural diversity, hosting students from 24 different countries.

The UDEM encourages its students to have a global vision of the world. To achieve this purpose, it prepares students to deal with it through different areas

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of life and contexts. It becomes natural for them, in view of the university's catholic inspiration, to find significance in serving others and the community. Part of the students' holistic formation, includes their commitment to their own growth totally bonded to their community's development. This turns into a fundamental challenge that goes beyond the graduation of professionals whom excel in their chosen fields of specialization to crafting socially sensitive individuals, willing to give their best and share their knowledge in order to build a better society (Conger & Benjamin, 1999).

The UDEM has a clear vision of what they expect in the future: be one of the top five catholic universities in the American Continent and the top one in Mexico. UDEM's experience and commitment of 40 years of an excellence in service are key factors to achieve this vision, therefore replicating in the strict process by which they select their faculty and future students, the opportunities for professional practices promoted among their students so they can be in contact with the needs of the real world and at the same time increase their chances of finding good job position in which they will contribute to their society and its improvement.

All about UDEM's community is devoted to the accomplishment of this vision. To start with, relying in their original philosophy as expressed in their ethical principles, mission and goals. The central values they stand for are individual and social responsibility, respect, honesty and sensibility to human expressions. It is recognized as pluralistic and is in a constant quest for truth.

UDEM's faculty is bringing their knowledge updated, keeping informed and continuously advancing in the academic processes. The university community benefits of the faculty with international/global experience in more than 16 different countries. Additionally, faculty contributes with their knowledge and experience, as consultants at the industry and the organizations. This is developed through their research centers, executive programs and community centers (Buxarrais, M. R., 1997). All of this is supported with a solid functional technological infrastructure and national and international accreditations.

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UDEM's strategies for the future go in three directions:

- Academic leadership,  
Position of the UDEM as the best university in Latin America in the areas of
  - Leadership and Organizational Change,
  - Quality Education and Poverty,
  - International Law and Intellectual Property,
  - Potential for doctoral programs and research centers.
- Educating and preparing change agents,
  - Unique model of integral education to prepare future leaders with the skills of transform their environment,
  - Increase of activities to foster leadership skills and service attitude,
  - International educational experience,
- Sustained growth and development,
  - Growth to 12,000 students,
  - Increase SAT standards to 1400 in 2020,
  - Increase financial aid options,
  - Expand executive education programs,
  - Increase quality of faculty,
  - Financial campaigns for infrastructure.

### **UDEM'S three social responsibility initiatives**

To this point it has been stated that the UDEM is committed toward its society. Resembling the aspiration of increasing the university's social value, three of the institution's initiatives are described in the following sections.

#### ***Quality of life index research***

Proposed and developed by UDEM's Center of Well-Being Studies, one of the University's strategies and initiatives in research, which contributes in

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new knowledge dissemination with practical application, is the Quality of Life index research project. The UDEM has always searched for new alternatives to foster well being among their community members (Flores Torres, 2004). A few years ago, a group of professors from diverse disciplines, founded the *Center for Well Being Studies*. The center's recent project is concerned with the investigation in the quality of life subject, en route for a more global concept and also responding to the international need to build alternative indicators besides GDP (Gross Domestic Product) to measure nation development and progress (Hernández & Székely, 2005).

International well-known researchers have visited UDEM to present the most recent findings on the topics of happiness, well being and quality of life. A book was published with the results of a local survey on happiness and values; and some articles have been published with the contribution of the members of this center. More recently, research has focused on the development of a national quality of life index, following the global trend in search for better indicators of progress.

Every society has a desire to achieve economic development and progress. This term may imply more infrastructure and resources availability for a community; but it also could mean more employment, democracy or a better quality of life (health improvement, more income, etc.). The question of what determines economic growth is far from being resolved. Studies show evidence of a relation among some macroeconomic variables and for example, poverty reduction (Hernández & Székely, 2005). However, there are still questions about some other aspects of the human being that may also be related and could complement GDP measurements. There is a call for exploring relationships between economic growth and other variables (Walton, 2005).

Some of the issues GDP does not consider by design are not distinguishing between positive and negative activities, wealth distribution or measures of environmental devastation. Therefore, as the OECD has publicly declared, new measures for progress are needed.

For a start, the center proposition goes in the line of defining the concept. As another option of measuring progress:

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*“Quality of life is an individual’s perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. It is a broad-ranging concept, affected in a complex way by the person’s physical health, psychological state, personal belief and social relationships to salient features of their environment” (Phillips, 2006).*



\*INCAVI stands for its acronym in Spanish

**Figure 1.** The domains of the QQL in Mexico

Quality of life is a multidimensional construct employed to build a composite index which includes quantitative and qualitative measures derived from a series of observed facts that may reveal relative positions in a given area (OECD). Figure 1 describes the domains of the Quality of Life Index.

Overtime, the index will point out the direction of change, mark trends and draw attention to particular issues. The Center of Social Studies and Public Opinion of the Mexican Congress welcomed UDEM’s Center of Well Being proposal and jointly established a year-long set of activities:

- Integrate a quality of life (QOL) research and advisory team.
- Organize an international seminar on quality of life.
- Discuss the key elements to be included on the QOL index.
- Build a structural framework.
- Gather data to construct the QOL index.
- Draw preliminary results and discuss them with the advisory team.
- Present the final results by Spring 09.

A QOL Index for Mexico (INCAVI) could bring several benefits to the society: provide an alternative for measuring progress, enhance democracy, promote accountability, and increase policy making efficiency. Monitoring and making public the results of the INCAVI will allow everyone to find out the progress and development as a society. Contribution of the citizens of life domains that are of their interest will enhance democracy. On the other hand, measuring progress or setbacks towards public goals, will provide elements to evaluate the public function (Santiso, 2008). Finally, the decisions of public policy will be more efficient if they are based on the evidence drawn from the INCAVI.

### ***Social entrepreneurship***

Another initiative, promoted by the Business School and according to the university global strategy of training individuals to change agents, is the *Small Business Incubation and Development Center* (CIDEM for its acronym in Spanish). CIDEM's mission is to promote entrepreneurial culture within UDEM's community, to foster the creation and competitiveness of SME's, focused on: innovation, commercialization of technology and internationalization. The center main idea is taking visions into reality.

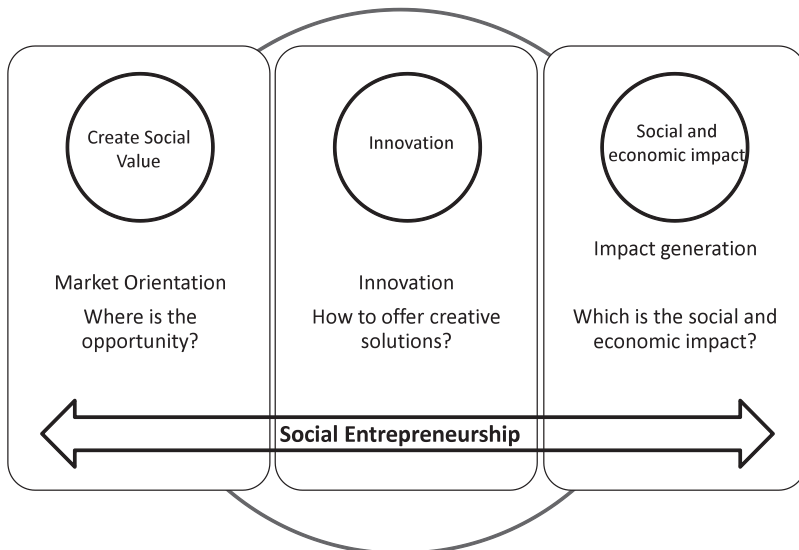
Social entrepreneurship must be set apart from business entrepreneurship, which provides a foundation for the social sort. A dilemma exists due to the fact that their intentions are dissimilar. While business entrepreneurs aim toward profiting, social entrepreneurs aspire to create social value that not only has to have an immediate result, but also a durable and effective social impact to facilitate social improvements. "For a social entrepreneur, the social

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mission is fundamental. This is a mission of social improvement that cannot be reduced to creating private benefits” (Dees, 2001).

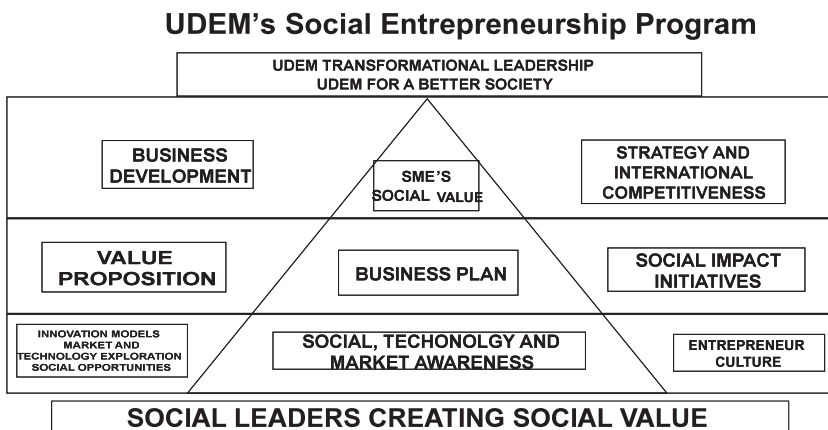
It is a fact that not every leader is fitted to be an entrepreneur. Social entrepreneurs are special leaders. The Small Business Incubation and Development Center recognizes this and under this ideology has designed projects and programs with the goal of diversifying the members of society that participate in them.

At the CIDEM, participants are exposed to different social demands in order to design a new venture always keeping in mind, since its origins, a win-to-win relationship between business and society. In order to become real opportunities, an “attractive” opportunity is one that has sufficient potential for positive social impact to justify the investment of time, energy, and money required to pursue it seriously (Guclu, Dees & Anderson, 2002); the center supports in the process by applying theory, models and resources creating a business model that becomes an attractive opportunity that has a social impact (Bloom G. M., 2006). The CIDEM’s Social Entrepreneurship conceptual is summarized in three stages as follows: market orientation, innovation and impact generation (see figure 2).



**Figure 2.** UDEM’s Social Entrepreneurship conceptual model

The center is concerned in scaling social value because they want to have “as big impact as possible on social problems and because its donors and sponsors are hungry to achieve high “social” returns on their investments” (Bloom P. A. & Chatterji, 2009). In order to achieve this purpose, CIDEM works a 2.5 years program to have participants informed about social central problems, needs and how to really make a difference through great improvements (see figure 3).



**Figure 3.** UDEM’s Social Entrepreneurship Program

During the pre-incubation phase of the program, the goal is to foster entrepreneurial culture, this is done through academic programs, an innovative model based on experience from top rated universities all over the world, academic seminars in collaboration with SME’s, mentoring among other activities such as extra-curricular events like conferences and symposiums.

The main purpose of the incubation phase is to create a new business based on innovation. To achieve this goal, the center operates a model certified by the Mexican federal government. It also offers to the new entrepreneurs, business infrastructure as office space, IT equipment, meeting rooms and laboratories among other complementary services. Other services are available for entrepreneurs, such as counseling programs with more than 20 years of experience, contact to seed capital, funding as well as national and international networks.

The post-incubation phase function is to increase SME's competitiveness, to foster commercialization of technology and internationalization. This is achieved jointly with TECHBA and SBDC networks and also through a commercialization of technology and an internationalization program.

New competitive businesses have an immediate social impact; they help students and other change agents in the society, to be aware of their potential and consolidate real entrepreneur leaders. The entrepreneurial culture develops and establishes a continuing improvement cycle overtime.

The third of the initiatives is described in the following paragraphs and it has become the pillar that holds up the backbone of UDEM's learning and formation strategies.

### ***Personalized Educational Plan***

UDEM's original educational model offers a custom-made plan for each student. This experience fosters a unique support environment that allows personal development by:

1. Evaluating students on an individual basis.
2. Converging and aligning academic requirements and formative experiences.
3. Emphasizing UDEM's unique features, value proposition and strengths.
4. Making emphasis on personalized and individual coaching; strongly stressing personal attention.

The model (see table 1) main purpose is to provide guidance to each student's decision making process regarding his or her course work and complete integrated curriculum, also to:

- a. Make an assessment of each student before his or her enrollment, during the course of their studies, and at the end of his/her course work. .
  - b. Guide the student in the process of selecting classes, activities and events.
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- c. Offer databases and informational systems to help track the student's path during his or her course work.
- d. Provide comprehensive and understandable charts of the different academic and educational options available.
- e. Explain the curriculum offered and the possibility of choosing specific analytical courses.
- f. Make sure he/she has the possibility of an internship or work experience before graduation as well as opportunities studies abroad.
- g. Guidance in the development of a resume which represents the student's overall achievements during his studies at UDEM.

UDEM's model goes along with each student, advises them so they may plan their personal and professional career and provide them the responsibility of this process. Students playing an active and fundamental role in their academic life, provide them training for their role in real life, as participating and cooperative citizen in their society. (see table 1).

### **Conclusions, discussion and further challenges**

The Universidad de Monterrey is playing a fundamental role in its society. Through programs and initiatives, The UDEM has joined together humanities and scientific knowledge which represent practical efforts of the social responsibility of the university. The *Quality of Life index* research is advancement in providing social data besides the economic indicators that are not enough measures to assure society's sustainable development.

The *Social entrepreneurship model* is confronting the social issue dilemma of making all the society's participants aware of what it means to have a social impact and to form social entrepreneurs as change agents with the following characteristics:

- Adopt a mission to create and sustain social value (not just private value),
  - Recognize and relentlessly pursue new opportunities to serve that mission,
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**Table 1.** UDEM's custom-made plan for each student

Stages	Description
<p><b>Vision</b></p> <ul style="list-style-type: none"> <li>• Choose your future</li> <li>• Know your potential</li> <li>• Develop your vision</li> <li>• A benefit: UDEM's educational model (core)</li> <li>• Design the pillar bases of your professional career and your life</li> </ul>	<ol style="list-style-type: none"> <li>1. Professional advice is offered to students at their entrance to UDEM.</li> <li>2. A personal file is created, using a series of tests and diagnostics which assess the student's personality, interests, abilities, leadership, and professional aptitudes.</li> <li>3. Each student makes a selection from the following formative activities: cultural, sports, pastoral, civic/political, and community development.</li> <li>4. Courses that provide a general interdisciplinary education favor a cohesive vision of scientific activity and develop methodological techniques which promote values and attitudes that foster the ethical practice of a profession. It guarantees the fluency in a second or third language, as well as a greater social consciousness.</li> <li>5. Coursework which constitutes the core knowledge of the chosen major.</li> </ol>
<p><b>Process</b></p> <ul style="list-style-type: none"> <li>• Determine your goals</li> <li>• Create a global vision</li> <li>• Direct your professional career</li> <li>• Expand your horizons</li> <li>• Discover the inherent value in serving others</li> <li>• Concentrate</li> </ul>	<ol style="list-style-type: none"> <li>6. Reevaluates the development of the student's course work.</li> <li>7. The student chooses from among six-hundred upper-level alternatives in his/her area of specialty in the best universities around the world to experience a global education.</li> <li>8. Obtains a certificate of completion which provides prestige to his/her educational experience.</li> <li>9. Explores other professional areas, in order to fulfill any curiosity about other career options by choosing from among one-hundred and ten minors.</li> <li>10. Carries out his/her social service choosing from among one-hundred and twenty projects in seventy institutions.</li> <li>11. Defines his/her priorities and chooses a specific area of expertise in which to develop in-depth knowledge within the chosen degree program. Each program offers at least two professional concentrations.</li> </ol>
<p><b>Success</b></p> <ul style="list-style-type: none"> <li>• Go further</li> <li>• Take it to the next level</li> <li>• Practice your profession</li> <li>• The path headed for success</li> </ul>	<ol style="list-style-type: none"> <li>12. Plans his/her future to include or advance post-secondary studies.</li> <li>13. Becomes trained to develop professional interview techniques, and to construct a curriculum vitae.</li> <li>14. Acquires professional experience by carrying out real world projects. Obtains at least one year of professional experience prior to graduating, as well as certificates, diplomas, technical courses in external professional environments, having at least two options in any degree program. Becomes a part of a professional database with access to job and internship opportunities.</li> <li>15. Acquires a solid professional curriculum developed in conjunction with completion of course work.</li> </ol>

- Engage in a process of continuous innovation, adaptation, and learning,
- Act boldly without being limited by resources currently in hand, and
- Exhibit heightened accountability to the constituencies served and for the outcomes created (Dees, 1998).

The *Personalized Education Plan* intends to make their students aware of their formation and development. This is not only to be informed, but to reflect from what they learn and how they use that learning in favor of their community.

Historically, the UDEM philosophy is committed to guide and support students in their general and specialized education. As any organization in favor of the society welfare, the challenges that need to be faced, in particular with the core and general competencies of the future leaders in order to create social value:

- Non favorable conditions in business and public environments that demand a good calibration of ethical decision-making.
- Expand the voluntary activities at UDEM to enhance student development in their personal and career life.
- Develop the core competencies to be known, with specialized knowledge to solve society's central problems.
- Have empathy for others. Benefit in the emotional arena from social experiences during academic life.
- Natural promoters of democracy and high involvement in community decisions.
- Manage IT and new educational strategies and models to enhance career life.
- Take accountability for each one own actions (Messick, 1999).

The UDEM realizes that to advance and to obtain valuable social impact, it is necessary to build a vibrant community of practice and knowledge, and strengthen the ecosystem in which social entrepreneurs do their work (CASE,



2008). UDEM's community makes a public commitment to keep ready to act in any feasible and reasonable way to put the pieces of the puzzle together in order to achieve improvements that contribute to social creation of value of the local, regional, national and global communities.

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# BUSINESS ETHICS, CORPORATE SOCIAL RESPONSIBILITY AND SUSTAINABILITY: CURRICULA REFORM, RESEARCH AND DIALOGUE AT ICADE IN THE CONTEXT OF THE BOLOGNA CONVERGENCE PROCESS OF EUROPEAN HIGHER EDUCATION

ALFREDO ARAHUETES GARCÍA, DEAN, ICADE, UNIVERSIDAD PONTIFICIA COMILLAS, ESPAÑA  
arahuetes@cee.upcomillas.es

ROBERT A. ROBINSON, PROFESSOR AND EXECUTIVE DIRECTOR FOR INTERNATIONAL RELATIONS,  
UNIVERSIDAD PONTIFICIA COMILLAS, ESPAÑA  
robrob@cee.upcomillas.es

THIS WORK WAS PRESENTED AT THE LATIN AMERICAN RESEARCH CONSORTIUM AND DEANS  
WORKSHOP (LARC), NEW ORLEANS, LA, UNITED STATES  
MARCH, 2009

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## Introduction

This short paper, motivated by participation in this forum, reports a self-assessment exercise undertaken at ICADE in relation to the themes of business ethics, corporate social responsibility (CSR, hereafter) and sustainability. It comes at a time when the institution is undertaking important curricula reform at the undergraduate and postgraduate level in the context of the Bologna process of convergence in European Higher Education.

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## **The place of business ethics, CSR and sustainability in business education**

It is commonplace to identify successive corporate scandals and pressure from stakeholders (students, government, civil society and the media) as key catalysts provoking critical reflections by business and business schools with respect to the 'business in society' debate. The near-meltdown of the global financial system and accompanying financial scandals in recent months only serve to underline the urgency and vitality of this debate. Thus, it is pertinent and timely that the issues of organizational ethics, CSR and sustainability be discussed in this forum comparing and contrasting US, 'European' and 'Latin American' perspectives and experiences.

Ethics and morals have long been embedded, explicitly or implicitly, in the values, norms, conventions and principles conveyed in business education. As we know from personal experience, it would be wrong to assume that professors of business disciplines routinely identify with the capitalist philosophy of the free market and the maximization of profit and shareholder value *à la Friedman* (1970). Indeed, frequently to the surprise of many students and businesspeople, not all scholars who work in business schools are 'kamikaze' capitalists bereft of "any sense of moral responsibility" to paraphrase Sumantra Ghoshal. For instance, the tradition of critical management studies is well-established in the British university system and a source of challenge and critique to the dominant capitalist paradigm of production and consumption. Within the Jesuit catholic tradition of business education, morals and values have always occupied a quintessential, prevailing position in teaching and research. This is certainly the case at ICADE (Universidad Pontificia Comillas) where ethical training is considered vital to an integral university education.

### **Ethics, CSR and sustainability in business education in Spain**

No single 'European' perspective on organizational ethics, CSR and sustainability in business education can be observed (van Luijk, 2001; Gardiner and Lacy, 2005). Despite the establishment of the European Academy of Business in Society in 2002, with a aim to develop a shared vision towards CSR (a broad, umbrella term which usually includes business ethics and sustainability), the heterogeneity of European approaches is, perhaps,

the most salient characteristic of European business schools. The diversity of European approaches is probably due to various factors: the result of linguistic, cultural, religious, philosophical and educational differences, distinct business systems and practices, variegated regulatory frameworks, and the plethora of terms used to describe similar themes, among others. Certainly some researchers have highlighted the within Europe differences between Anglo-Saxon and Nordic countries and Continental European countries (Matten and Moon, 2004). It is an open question and ongoing debate whether or not there is a Spanish version of social responsibility and sustainability business education. The following discussion may help clarify things.

### **Ethics, CSR and sustainability in business education at ICADE**

The Bologna Reform process has presented a unique opportunity for ICADE to review and revamp its approach to ‘business in society’ issues in the redesign of its curricula. Indeed, it is a critical moment in ICADE’s development just as it celebrates its 50<sup>th</sup> anniversary. At this moment ICADE is entering into uncharted waters and the strategic decisions taken during this period are going to determine the institutions survival in the long term. As from September 2009 we will be commencing a new undergraduate business administration program which contains significant course innovations. From the outset, ICADE has chosen to introduce stand-alone courses and eschew the integration approach adopted by the other Spanish business schools, at least formally.

Perhaps, for many, this approach seems overly cautious or even downright conservative. However serious doubts have been raised concerning the appropriateness of this approach for undergraduate business education. The results of mainstreaming have been somewhat mixed. We are faced with the problem that many professors are unprepared to throw away the safety blanket, stand out of the box (that is to say, their own discipline) and consider from an academic standpoint issues about ethics and CSR. If we want professors of the functional disciplines to teach about ethics and CSR we will have to investment time and money to prepare them to be able to discuss with some authority questions involving values and beliefs. Given the present constraints this option, at least in the short term, does not seem feasible. In addition, there would appear to be a dearth of adequate materials for undergraduate

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level teaching. Most materials seem to have taken the format of case studies more in line with postgraduate teaching strategies. Moreover, there appears also to be a lack of up-to-date, relevant case studies for basic courses like finance, organizational behavior and strategy according to representatives of the European Academy of Business in Society reported in the Wall Street Journal (2007:B7).

Thus, to be rather candid, we are not convinced that 'mainstreaming' is the right approach to adopt at our school for the moment. Indeed we believe that undergraduates will be much better served by stand-alone courses on ethics and CSR that provide fundamentals such as theories of moral philosophy.

## Conclusions

Despite the high profiling of activities related to CSR themes by many business schools this area of knowledge continues to get less attention than traditional core curriculum courses. The identification in this paper of the principal teaching and research strategies employed by the most prominent Spanish business schools has highlighted the popularity of the integration and mainstreaming approach over and above the stand-alone traditional course method of ethical training. On a final note, after reviewing the degree of integration of CSR issues into the Spanish business education system one is left with the feeling that perhaps all that glitters is not gold. On occasion there may be less to this than meets the eye.

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## WHAT CAN LATIN AMERICAN SCHOOLS OFFER TO THE CHALLENGE OF SOCIAL RESPONSIBILITIES

JULIA SAGEBIEN, UNIVERSIDAD OF PUERTO RICO, PUERTO RICO  
julia.sagebien@dal.ca

THIS WORK WAS PRESENTED AT THE LATIN AMERICAN RESEARCH CONSORTIUM AND DEANS  
WORKSHOP (LARC), NEW ORLEANS, LA, UNITED STATES  
MARCH, 2009

*“In the future everyone will be famous for fifteen minutes.”  
I’m bored with that line. I never use it anymore. My new  
line is, “In fifteen minutes everybody will be famous.” Andy  
Warhol, Andy Warhol’s Exposures (1979) “Studio 54”<sup>2</sup>*

Business schools may have already had their 15 minutes of fame – and in fifteen minutes, their era of infamy may very well start, if it has not done so already. As the search for the culprits of the global economic meltdown intensifies, business schools are being called to explain how some of the captains of industry that they had so proudly trained, ended up, knowingly and shamelessly, sinking their ships with all on-board, except for themselves and their loot.

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2. The Quotations Page. [http://www.quotationspage.com/quotes/Andy\\_Warhol/](http://www.quotationspage.com/quotes/Andy_Warhol/). Retrieved April 16, 2009.

During the era of open markets, free trade and less government intervention that characterized the last decade of the 20<sup>th</sup> C and the most of the first decade of the 21<sup>st</sup>, market-oriented careers became the “in thing” for the “best and brightest” students world-wide, much the same way in which medicine, engineering, the military, and law had done in the past. In Latin America, degrees from the region’s top business schools, and “pedigrees” from the top business schools in the United States (to a lesser extent the EU), were highly sought after by students (mostly the children of the elites who could afford it) as passports to success and assured access into the small circles of power our highly stratified societies.

Latin American business education, has, by and large, been influenced by the center-periphery dynamics of colonial education. Models and modes of education have been imported full-line and sinker without much questioning of the conditions and assumptions that supported the paradigms on which they were based. The market fundamentalists of the era had a nearly “magical realism” belief in notions such as the “invisible hand” – a hand which in Latin America, was likely to have its palm greased. The role of the business schools during this era of neo-liberal economic reforms was to operationalize this model by training (in skills and values) the generals, high and mid-level officers, and general rank and file of the institutions that populate the market, as well as those of the institutions charged with creating “a business friendly enabling environment” for them.

An unfortunate result of the combination of increased social and economic externalities brought about by rapid globalization, the retrenchment of government undertaken as part of market reforms (e.g. privatization), and traditionally weak institutions (e.g. courts, police, health care, environmental regulation, etc) was “governance gaps”. As stated by Ruggie:

The fundamental defect of global society today is not that the reach of corporations is too big, but that our ability to govern is too small. We face governance gaps and governance failures on a monumental scale. Our core challenge, therefore, is to stimulate social and political processes that will help bridge the gaps and reduce the failures.

One of these processes has been Corporate Social Responsibility (CSR). CSR is a catchall term, but most definitions include reference to its “voluntary”

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(i.e. beyond legal obligation) and discretionary nature of corporate efforts to address these social and environmental governance gaps and to forge more positive relationships between the firm and its internal and external stakeholders. Since the externalities have been so deeply rooted, the private sector so simultaneously uncaring and paternalistic, and the governance gaps so large – the demand for CSR in the region, has also been loud and clear. Whether through “bottom of the pyramid” business strategies, community engagement programs (e.g. popular in the extractives sector), outright philanthropy, a number of Latin American companies, have strived to improve their social and environmental record (see IDB CSR Americas). In countries like Brazil, it has become part of the business culture.

While unfettered markets tend to concentrate power by concentrating wealth (simple capital accumulation and competitive advantage), democratic electoral policies tend to diffuse power by incorporating into national decision-making an increasing array of social actors. In neo-liberal Latin America, the left tended to be right about what was wrong with this economic model, but for nearly a decade, there was only the right to do anything about it. This has, however, changed. In many of the Latin American countries where the loss of confidence in the private sector as an engine for growth and a responsible social agent has been more generalized, left of center governments have been voted back in to close governance gaps (at least the social-policy related ones). In countries like Venezuela, what was once voluntary may now be regulated (special discounts vs. price controls), and what was once private may now become public (e.g. nationalized sectors such as cement production, etc). This has changed the nature of CSR by changing the nature of the firms (e.g. nationalization, a disabling and hostile business environment, as well as credit shortages and capital/FDI negative flows) and of its stakeholders (interventionist state policies and disenchanting consumers/citizens).

2008 was an *annus horribilis* for the world. The excesses of unregulated short-term oriented financial markets in the developed world precipitated a deep economic crisis of global proportions and forecasted long-lasting impact. Moreover, the accumulation of decades of greenhouse gas emissions is bringing climate systems to a tipping point of irreversible change. The end era of nuclear détente between a limited number of big powers has not brought a

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peace dividend; it has brought instead, an era of difficult to contain fragmented nuclear threats. What was once a matter of moral hazard (the tendency to engage in risky behavior when third parties suffer the consequences of the risk) has now become a matter of prisoner's dilemma (optimum results can only be achieved through cooperation strategies). For Latin America, the meltdown has many negative consequences for economic growth and could reverse the social and economic advances of the past decade of reforms. Among the few positive consequences of the global economic recession, and of the seeming rapid advance of climate change, is that it has brought the impact of negatives externalities "home" to the developed world. This increased awareness by the general public in the developed world has brought along with it demands on governments to "do something" through the once maligned means of "government intervention". The reduced earnings of firms have made CSR values ever more necessary (e.g. lay-offs, philanthropy, etc) while at the same time, reducing the budgets available for voluntary and discretionary activities. More targeted, efficient and state-linked CSR is likely to emerge.

North American and EU business schools may well have more advanced research and modeling of CSR than to Latin America's business schools. However, a number of business schools in the latter region have become world-class leaders in CSR strategy-development and executive training as a response to the needs of the national and trans-national business communities that they serve. The Latin American CSR research community may not have all the answers, but we have been witness to the region's long trajectory with poverty, environmental degradation, economic uncertainty and political turmoil. As long as these kind of issues remain relevant at the *center*; the *periphery* will have an opportunity to export its know-how and experience. In our heart of hearts – we know that the conditions that underpin classical economic models are simple "ifs" that, more often than not, are ephemeral if not simply, absent. Our understanding of the socio-political-economic nature of the global problems that will characterize the *Zeitgeist* of the second decade of the 21<sup>st</sup> C, our capacity to live with chaos and unpredictability as the norm, as well as our track record in developing simple, low-cost effective solutions to these problems, will certainly be in high demand in the evolution of CSR thinking – worldwide.

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SELECTED PAPERS

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## DO YOU A FAVOR? SOCIAL IMPLICATIONS OF HIGH ASPIRATIONS IN NEGOTIATION

HANNAH RILEY BOWLES, HARVARD UNIVERSITY, UNITED STATES  
Hannah\_bowles@harvard.edu

LINDA BABCOCK, CARNEGIE MELLON UNIVERSITY, UNITED STATES  
lb2k@andrew.cmu.edu

LEI LAI, TULANE UNIVERSITY, NEW ORLEANS, UNITED STATES  
llai@tulane.edu

THIS WORK WAS PRESENTED AT THE LATIN AMERICAN RESEARCH CONSORTIUM  
AND DEAN'S WORKSHOP (LARC)

MANAGEMENT RESEARCH SEMINARS PRESENTATION  
NEW ORLEANS, LA, UNITED STATES  
MARCH, 2009

The goal-setting literature in negotiation suggests that parties who set relatively ambitious aspirations tend to claim higher individual payoffs (Galinsky, Mussweiler, and Medvec, 2002; Hamner and Harnett, 1975; Neale and Bazerman, 1985; Siegel and Fouraker, 1960; White and Neale, 1994) and to reach more efficient agreements in negotiations with integrative potential (Ben-Yoav and Pruitt, 1984; Kimmel, Pruitt, Magenau, Konar-Goldband, and Carnevale, 1980; Pruitt, 1998; Polzer and Neale, 1995). While negotiators with ambitious aspirations do tend to outperform those with less ambitious aims (Zetik and Stuhlmacher, 2002), they are also more likely to incur delays

in achieving agreement (Neale and Bazerman, 1985), run a greater risk of impasse (Babcock and Loewenstein, 1997; Ben-Yoav and Pruitt, 1984; Huber and Neale, 1987; White and Neale, 1994), be less satisfied with outcomes (Galinsky et al., 2002), and be judged more negatively by their negotiating counterparts (Morris, Larrick and Su, 1999).

We propose another potentially negative implication of high aspirations, such that negotiators with ambitious aspirations may risk creating negative impressions on their negotiating counterparts that could have spillover effects beyond the one-time interaction. We test in an experimental context whether the pursuit of more (vs. less) ambitious aspirations will diminish the potential for future cooperation with one's negotiating counterpart. We predict that negotiators with ambitious aspirations will obtain more favorable agreements than those with less ambitious aspirations while incurring higher social costs in future interactions. We further predict that perceived likeability of the negotiators with ambitious aspirations mediates the effect of aspirations on their counterparts' willingness to cooperate with them in the future.

## **Experiment**

*Participants.* A total of 134 undergraduates (67 negotiating pairs) participated in this study. Five pairs were removed from the analysis due to fail to follow instructions.

*Procedure.* The negotiation scenario involved a supplier (seller) and a motorcycle manufacturer (buyer) negotiating over the price per unit on a special order of headlights (an adapted version of Sebenius, 1996). We randomly assigned participants to roles of seller and buyer. We manipulated whether the buyers pursued a more or less ambitious agreement price, which we correspondingly refer to as "high" vs. "low" aspirations. Immediately following the negotiation, participants completed a survey regarding their offer behavior, negotiation outcomes, their impression of their negotiating counterparts, and their willingness for future cooperation with their negotiating counterpart. After the survey, we collected a behavioral measure of the sellers' future generosity toward their negotiating counterpart using a dictator game. In the game, sellers (buyers) played the role of decision-maker (decision-receiver) splitting the \$10 with the person with whom they had just negotiated.

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*Post-negotiation Measures.* We used an adapted version of Rudman and Glick's (1999) Social Skills Index as a measure of the negotiators' impressions of the likeability of their counterpart. Participants rated on a scale of 1-7 how much each of the following 11 words characterized the impression created by their negotiating partner: fair, friendly, good listener, helpful, kind, likeable, popular, sensitive to the needs of others, sincere, supportive and warm. As a measure of their willingness for future cooperation, the participants indicated on a scale of 1-7 how inclined they would be to do this person a favor, to have this person on their team for a class project, to recommend this person for a job, and to include this person in social activities with other classmates.

## Results

*Economic Outcomes.* Consistent with expectations, buyers instructed to pursue high (vs. low) aspirations negotiated significantly lower prices,  $t(60) = 6.09$ ,  $p < .001$ , and paid approximately 10% less per unit,  $M$  difference = \$2.43,  $SE = 0.40$ .

*Social Outcomes.* As hypothesized, the sellers found the buyers who pursued high (vs. low) aspirations to be significantly less likeable,  $M$  difference = 1.03,  $SE = 0.28$ ,  $t(60) = 3.72$ ,  $p < .001$ , were less motivated toward future cooperation with them,  $M$  difference = 0.66,  $SE = 0.30$ ,  $t(60) = 2.21$ ,  $p = .03$ , and were less generous toward them in the post-negotiation dictator game,  $M$  difference = \$1.30,  $SE = 0.48$ ,  $t(60) = 2.72$ ,  $p < .01$ . The perceived likeability of the buyer mediated the effect of aspiration on the sellers' willingness for future cooperation with the buyer,  $z = 3.24$ ,  $p = .001$  (Sobel 1982).

## Discussion

In this distributive bargaining experiment, we found that negotiators with more ambitious aspirations claimed a significantly greater percentage of the surplus. This finding replicates the well-established benefits of high aspirations in terms of the economic outcomes in competitive negotiations. However, our analyses of the social outcomes of this negotiation revealed that the pursuit of more ambitious aspirations reduced the perceived likeability of the negotiator. The counterparts of negotiators who pursued more ambitious aspirations were significantly less inclined to cooperate with them in the future

and behaved significantly less generously toward them in a post-negotiation dictator game.

Within the context of this particular negotiation, it is unclear whether the additional money that the negotiators who pursued more ambitious aspirations earned would have outweighed in their own minds the relatively negative impressions they made on their negotiating partners. Arguably, most negotiations carry at least some potential for future cooperation. In many negotiating situations, reaching agreement becomes the first stage of negotiation in an ongoing working relationship, and the social outcomes of initial deal-making could have lasting implications for the quality of that working relationship (Barry and Oliver 1996; Fortgang, Lax, and Sebenius 2003; Gray 1989).

The current research contributes to both the literatures on goal-setting and negotiations. The findings of our research demonstrate that there may be substantial trade-offs between the individual performance gains and the tax that striving for those gains levies on the social interaction.

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## THE RESPONSIBLE DESIGNS: AVOIDING CONFUSION IN CATEGORIES WITH “ME TOO” PRODUCTS

JULIO CESAR ALONSO, UNIVERSIDAD ICESI, COLOMBIA  
jcalonso@icesi.edu.co

ANA MARIA ARBOLEDA, UNIVERSIDAD ICESI, COLOMBIA  
amarboleda@icesi.edu.co

THIS WORK WAS PRESENTED AT THE LATIN AMERICAN RESEARCH CONSORTIUM  
AND DEAN’S WORKSHOP (LARC)

MANAGEMENT RESEARCH SEMINARS PRESENTATION  
NEW ORLEANS, LA, UNITED STATES  
MARCH, 2009

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### **Abstract**

Competitive practices in Colombia support the use of look-alike package designs, so called “me too” products, as long as these do not lead to consumer confusion. This paper is particularly concerned about the probability of consumer confusion with Over the Counter (OTC) medicines. We define consumer confusion as choosing a different brand from the expected (Foxman, 1990). In this context, responsible competitive practices involve having package designs that allow the costumer to make an accurate decision. Hence, it is important to understand the causes of consumer’s mistakes after buying

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a “me too”. However, current empirical studies show contradictory results: on one hand similarities provide an understanding of category standards (Chryssochoidis, 2000), but on the other hand, being a-like is probably what causes confusion (Mitchell & Papavassiliou, 1999). Therefore, our purpose is to explain the probability of consumer’s confusion occurrence for different kind of goods. In the following section we discuss briefly the rationale for each of our hypothesis, then we present the experiment and the statistical model used to draw our conclusions. Finally, we summarize our results and outline research conclusions and limitations.

## Hypotheses

“Me too” products are common in mature markets where product characteristics are relatively standard (Grant, 2008). Because of this, consumers are able to categorize these characteristics (Basu, 1993; J. B. Cohen & Basu, 1987) having in mind a prototype product. But, despite characteristics are generalized to the category, consumers do recognize subtle differences. Thus, we assume that *deciding to buy a “me too” does not explain by itself the probability of confusion*. Instead, there are other issues (i.e. branding & time) that may prevent confusion. For instance, brands are by themselves a differentiating element of the product. Therefore, having a memorable and unique brand name is important to avoid confusion (Kenagy, 2001). Hence, we expect that *a choosing a Top of Mind (TOM) brand will be negatively associated with the probability of confusion*. Moreover, the brand signals particular characteristics of the product (Miaoulis & D’Amato, 1978). Thus, having a clear and visible brand is essential in differentiating the leader from the “me too”. Hence, we suggested that *the presence of the brand is negatively related with the probability of confusion*.

On the other hand, regarding the time spending the decision making process, the purchase of commodities is a relatively easy process because individuals already know the category (Fiske & Taylor, 2008; Schwenk, 1984). In turn, this results in less time for impression formation (Sujan, 1985) and a faster decision making process. However, the decision may be biased and the consumer may overlook information (e.g. the brand) and make an erroneous

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decision. Hence, we predict that *choosing a product given a restricted amount of time will be positively related with the probability of confusion.*

## The experiment

The experiment takes place in two moments, a pretest and a purchase exercise. During the pretest, students complete a questionnaire where they write their TOM brands for each category. A week later they are invited to the lab where they find three supermarket shelves that include medicines, food and personal care products. Participants are male and female undergraduate students from Icesi University at Cali-Colombia.

During the purchase exercise subjects receive a shopping list, a shopping cart and are assigned to a condition of “time” and “brand”. “Time” is coded as 1 for individuals who receive the instruction of going through the shopping process without time restriction (0 o.w.). “Brand” is operationalized as 1 if brands are visible and 0 if participants choose the product without having a brand on the package. TOM is coded as 1 if the participants buy the first brand they recall (0 o.w.). As participants finish the simulated shopping experience, without access to their shopping cart, they report the brands they bought. Their answers are compared to what is actually found in the cart. We code a wrong response, not having in the cart the expected brand, as 1<sup>3</sup> (0 o.w.). Moreover, if the individual chooses a “me too” product the variable is coded as 1 (0 o.w.). Finally, we control for demographic variables. Our basic model estimates the likelihood of confusion using a Logit model as follows:

$$P[y_i = 1 | \mathbf{x}_i] = 1 - F(\boldsymbol{\beta}^T \mathbf{x}_i)$$

$$P[y_i = 0 | \mathbf{x}_i] = F(\boldsymbol{\beta}^T \mathbf{x}_i)$$

Where  $y_i$  equals 1 if individual  $i$  is confused and zero otherwise. And  $\mathbf{x}_i$  represent a vector of characteristics of individual  $i$ , i.e:

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3. Previous research has also operationalized confusion in the purchase of original/lookalike brands as a mismatch between the chosen and expected brand. Balabanis & Craven (1997; Foxman, 1990) used showcards so the individual could first point at the one they had bought and second confirm if this was the one they intended to buy. To some extent we improve this measure because confusion is not measured as a perception but as an actual behavior (the individual takes the product placing it in the cart).
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$$\mathbf{x}_i = [1 \quad X_{gender} \quad X_{age} \quad X_{brand} \quad X_{time} \quad X_{TOM} \quad X_{me\_too} \quad X_{brand} \times X_{me\_too}]$$

## Results

We estimate 9 Logit models, one for each type of good: a) OTC drugs with “me too” products: wound disinfectant, pain pills, and multivitamins; b) OTC drugs without “me too” products: cough remedy, cold & flu, and vitamin c ; and c) food products with “me too”: powered soft drinks, lollipops, and cookies. Observing the estimates of the 9 models we find that TOM has in 8 of the models a negative relationship with the probability of confusion ( $p < .001$ ; except for cookies). Additionally, no significant results are observed for “time” estimates. Our hypothesis regarding the negative relationship between the presence of the brand and the probability of confusion is partly supported as we next explain.

Within the OTC models, we find that the presence of the brand plays an important role either decreasing confusion or moderating the effect of “me too” upon confusion. The presence of the brand is negatively related with confusion in the case of cold & flu packages ( $= -2.02$ ,  $p < .01$ ). Regarding the influence of buying a “me too”, we observe in the case of pain pills and wound disinfectant that choosing a “me too” product increases the probability of confusion ( $= 19.18$ ,  $p < .001$  and  $= 2.29$ ,  $p < .1$  respectively). But, in the case of these two categories the presence of the brand has an important moderating effect ( $= -18.18$ ,  $p < .001$  for pain relief; and  $= 17.07$ ,  $p < .001$  for wound disinfectant). Choosing a “me too” product while having the presence of the brand on the package is related with a lower probability of confusion compared with not having a visible brand.

Food categories offer a comparative scenario. Here we find an overall lower confusion probability (drinks: 30%, .5 s.d.; lollipops: 19%, .4 s.d.; and cookies: 13%, .3 s.d.) even though the three categories include “me too” products. (For OTC products probability confusion results are as follows: pain pills: 27%, .5 s.d.; wound disinfectant: 46%, .5 s.d.; multivitamins: 51%, .5 s.d.; cough remedy: 56%, .5 s.d.; cold&flu: 45%, .5 s.d.; vit C: 32%, .5 s.d.). Within the food products, only in the case of drinks the presence of the brand has a significant effect ( $= -2.39$ ,  $p < .001$ ), and is also negatively related with the probability of confusion. Regarding the “me too” variable, it is only significant for cookie’s

estimate ( $\beta = 3.58, p < .05$ ), thus choosing a “me too” is positively related with the probability of confusion. However, unlike the other cases where “me too” has a significant effect, in this case the “me too” effect upon confusion is not moderated by the presence of the brand. Thus, choosing a “me too” cookie increases by itself the probability of confusion.

Summarizing, our results provide evidence that “me too” products may or may not cause confusion depending on the product category. Thus, we encourage managers to be aware of this in order to have responsible package designs. However, given the most common results, in order to reduce “me too” products probability of confusion, marketing managers ought to work on strengthening consumers’ brand recall and, in some cases, on improving brand visibility within the package.

### Limitations & future research

Results are not generalizable throughout different categories, but instead we recommend testing for the probability of confusion on other categories. **Moreover, because of our sample, demographic characteristics are weak point. We recommend having a more diverse sample regarding age and education background. Our study does contribute to the literature on consumer confusion by providing a Latin-American sample. Although package designs are fairly similar compared to those in the U.S., individuals may have different buying habits.** Finally, studies such as this are an important practice because in one hand drugs may be a sensitive case of confusion and on the other hand it attends legal issues regarding patents and property rights.

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## MAKING DO WITH LESS: INCREASING THE HAPPINESS-TO-CONSUMPTION RATIO

SILVIO BORRERO, UNIVERSIDAD ICESI, COLOMBIA  
sborrero@icesi.edu.co

THIS WORK WAS PRESENTED AT THE LATIN AMERICAN RESEARCH CONSORTIUM  
AND DEAN'S WORKSHOP (LARC)

MANAGEMENT RESEARCH SEMINARS PRESENTATION  
NEW ORLEANS, LA, UNITED STATES  
MARCH, 2009

The pursuit of happiness is an important goal in consumer behavior, but one that many western cultures do not seem to be achieving through their materialistic-oriented consumption (Sujan, 2008). Based on a review of relevant literature, I proposed seven hypotheses on the relationships between happiness, wealth, entropy of consumption, gratitude, materialism, and individualism. To test these hypotheses, I conducted regression analyses, discussed preliminary results, anticipated potential contributions to the field, and suggested future research possibilities.

### **Money can't buy me love... or happiness**

There is significant evidence that a high level of material well-being does not necessarily result in happiness (Csikszentmihalyi, 2000; Myers, 2000; Van

Boven, 2005). Even if material goods may add to quality of life, the cost/benefit relation is not linear, and there is a threshold past which accumulating goods ceases to make people happier. Maslow's hierarchy of needs (1968, cited by Csikszentmihalyi, 2000) might explain why there is a limit to the amount of happiness someone can buy. That is, if consuming behavior responds to a desire to satisfy existentialist needs, increases in material well-being might translate into higher happiness only as long as individuals seek to satisfy their lower-order needs. Once these needs are satisfied, satisfaction of higher-order needs become more important, so engaging in purposeful activities will be better in helping people fill their personal voids. Seeking meaningful experiences, having close family relations, and socializing will then translate into a happier existence rather than accumulating more possessions (Csikszentmihalyi, 1990; Russell, 1930; Van Boven, 2005).

On the other hand, highly materialistic consuming patterns result in entropic processes that accelerate the planet's decay. The coincidence of high entropy and low SWB in some materialistic/individualistic countries suggests some fascinating inferences about the relationship between entropy of consumption and happiness at a national level. That is, collectivist/experientialist people could actually be happier than materialistic/individualist people.

It is also possible that consumers are happy simply by counting their blessings (Emmons & McCullough, 2003). Recent studies suggest that gratitude is a key factor in achieving well-being: a conscious focus on blessings appears to have benefits which in turn translate into happiness.

### **A grateful, experiential, and collectivist approach**

Happiness is an important construct in consumer behavior given its role as a driver of many consuming decisions. Based on the above rationale, I argue that whether consumers privilege an individualist/materialist or a social/experientialist consumption, how grateful they are towards their consumption, and how much such consumption contributes to entropy, are important determinants of happiness. The following hypotheses summarize the proposed relationships:

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- H<sub>1</sub>: Increasing wealth results in larger increases in happiness for poor countries than for wealthy countries, and there is a point past which wealthy countries cease to increase their happiness despite rising levels of wealth.
- H<sub>2</sub>: Increasing consumption entropy results in larger increases in happiness for poor countries than for wealthy countries, and there is a point past which wealthy countries cease to increase their happiness despite rising levels of consumption entropy.
- H<sub>3</sub>: Decreasing returns in happiness, in proportion to wealth, are stronger for non-materialist countries than for materialist countries.
- H<sub>4</sub>: Decreasing returns in happiness, in proportion to consumption entropy, are stronger for non-materialist countries than for materialist countries.
- H<sub>5</sub>: Decreasing returns in happiness, in proportion to wealth, are stronger for collectivist countries than for individualist countries.
- H<sub>6</sub>: Decreasing returns in happiness, in proportion to consumption entropy, are stronger for collectivist countries than for individualist countries.
- H<sub>7</sub>: More grateful countries are happier than countries that are less grateful.

### **Assessing world's happiness**

Using data for 191 countries from web-based databases, I assessed the proposed relationships, with the exception of the gratitude hypothesis given the absence of appropriate records. I obtained descriptive statistics and pair-wise correlation coefficients for all relevant variables using SPSS, and graphed the relationships between the variables in scatter-plots. The regression equations used to account for the direct and moderation effects were:

$$LS = \beta_0 - \beta_2(1/GDP) \quad (1)$$

$$LS = \beta_0 - \beta_2(1/EF) \quad (2)$$

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where  $LS$  is the country's life satisfaction, as an indicator of happiness;  $GDP$  is the country's GDP per capita, as an indicator of wealth; and  $EF$  is its ecological footprint, as a proxy for entropy. Including the moderator variables and their respective interactions with the predictors resulted in the following models:

$$LS = \beta_0 - \beta_1(1/GDP) + \beta_2M + \beta_3(1/GDP) * M + \varepsilon \quad (3)$$

$$LS = \beta_0 - \beta_1(1/GDP) + \beta_2I + \beta_3(1/GDP) * I + \varepsilon \quad (4)$$

$$LS = \beta_0 - \beta_1(1/EF) + \beta_2M + \beta_3(1/EF) * M + \varepsilon \quad (5)$$

$$LS = \beta_0 - \beta_1(1/EF) + \beta_2I + \beta_3(1/EF) * I + \varepsilon \quad (6)$$

where  $M$  and  $I$  are the national materialism and individualism indexes.

### Preliminary results

All the pair-wise correlation coefficients between the constructs of interest were significant at the 0.05 level (2-tailed) or more. As predicted, there is a positive relationship between wealth and happiness, and between entropy and happiness, which suggests that wealthier, more entropic countries are happier than poorer, less entropic ones. It must be noted, though, that these significant positive correlations respond to a  $f(x)=a-b/x$  type of function already observed by previous research for the relationship between material possessions and life satisfaction. Positive relationships were also found between wealth and entropy, materialism and individualism, entropy and materialism, wealth and materialism, entropy and materialism, and entropy and individualism, all of which support the basic assumptions leading to our moderation hypotheses. Regression analyses showed a significant  $R^2$  in each model. Significance of the individual terms supported Hypotheses 3, 4, and 5, with the coefficients' signs corresponding to the predicted relationships. Hypothesis 6 was not supported by the results.

The positive relationships between wealth and entropy, materialism and wealth, materialism and entropy, individualism and wealth, and individualism and entropy were to be expected, given the intuitive association of higher economic welfare with predominantly materialistic and individualistic western cultures that use natural resources more intensively.

## Make do with less

As expected, an experientialist behavior results in increased happiness, individualist and materialist behaviors yield higher entropy, and there is a limit to the happiness that can be achieved by increasing wealth and subsequent entropic yield. However, contrary to what I expected, collectivism does not appear to moderate the relationship between entropy and happiness. Furthermore, results somehow give materialistic consumers a cultural excuse to keep up a highly entropic consumption pattern. Alternative measures of materialism and collectivism should be explored before confirming or discarding these constructs as potential moderators.

Overall, the most important result was confirming a non-linear relationship between entropy and happiness and discovering that materialism can actually help people to be happy. It was also made quite evident that there is a threshold past which happiness ceases to increase, regardless of how many resources are consumed (or wasted) seeking material well-being, and that an experientialist existence should provide high levels of satisfaction. A socially-focused consumption could simultaneously preserve scarce resources and help people live happier, richer, and more fulfilling lives.

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# OPTIMAL PORTFOLIO ALLOCATION FOR LATIN AMERICAN STOCK INDICES

MAURICIO ARCOS, UNIVERSIDAD ICESI, COLOMBIA  
marcos@correo.icesi.edu.co

JULIAN BENAVIDES, UNIVERSIDAD ICESI, COLOMBIA  
jbenavid@icesi.edu.co

LUIS BERGGRUN, UNIVERSIDAD ICESI, COLOMBIA  
lbergrru@icesi.edu.co

THIS WORK WAS PRESENTED AT THE LATIN AMERICAN RESEARCH CONSORTIUM  
AND DEAN'S WORKSHOP (LARC)

FINANCE RESEARCH WORKSHOP PRESENTATION  
NEW ORLEANS, LA, UNITED STATES  
MARCH, 2009

## Introduction

Markowitz (1952) is considered the forefather of modern investment theory. He proposed that the problem of selecting an optimal portfolio should only be considered in terms of the mean and variance of assets' returns.

More specifically, Markowitz showed that the problem could be simplified as one of finding the portfolio that maximized returns at any given of variance or equivalently finding the portfolio that minimized variance returns at some level of portfolio returns. Solving this optimization problem, an investor can

find the efficient frontier that shows different combinations of risk and return obtained with efficient portfolios that include only risky assets. According to some degree of risk aversion, this investor can choose a utility maximizing portfolio.

Black and Litterman (1992) acknowledge two problems that plague optimal portfolio allocation exercises. The first is the difficulty in measuring expected returns and the second is the high sensitivity of allocation results to returns assumptions. They propose a model that merges both Markowitz methodology and Black's (1972) version of the CAPM to derive equilibrium risk premiums and consequently portfolio composition that tilt toward equilibrium values (i.e. portfolio weights are stationary and respond to investor's views of relative performance across assets).

More closely related to this paper, Michaud (1998) has identified instability and ambiguity as the two major weaknesses of Markowitz traditional approach. Changes in optimization inputs (standard deviations, expected returns and covariances between assets) can derive in significant changes in the optimal portfolio composition both in a cross sectional and in a time series fashion. Thus portfolio optimality is not clearly defined. Michaud provides a framework<sup>4</sup> in which the optimization problem can be thought in a statistical way in which portfolio weights are subject to estimation error and through simulation these weights can be included in (familiar) confidence intervals and be subject to hypothesis testing.

The purpose of this paper is to study the varying composition of optimal (tangency) portfolios of risky assets derived following several approaches. The tangency portfolios comprise US dollar investments in the seven most representative stock markets in Latin America (Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela) for the period September 2001 – December 2006.

Furthermore, it studies the stability of these portfolio weights and tries to determine if there is a tendency of these weights to revert to its mean values.

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4. Nobel laureate Harry Markowitz informally conceded that Michaud's methodology in regards to attaining efficient frontiers and optimal portfolios was superior to his. For details, see Chernoff (2003).

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In addition, this document analyzes the performance in terms of risk and return of these optimal portfolios and compares it to that of an equally weighted portfolio (naïve diversification).

## **Tangency portfolio composition**

The second section deals with the estimation of the tangency portfolio both in presence and absence of a risk free asset. This section explores four methods to attain portfolio weights of the tangency portfolio. These methods are closely related to different approaches to estimate the variance covariance matrix; a key input in the optimization process.

This paper takes the perspective of a U.S. or dollar denominated investor that wishes to build an optimal portfolio with stock investments in the most representative markets of Latin America.

The four methods use to estimate the variance covariance matrix and derive the tangency portfolio are:

### *Historical variance covariance matrix*

This is perhaps the most common way to estimate the variance covariance matrix of stock returns.

### *Semivariance semicovariance matrix*

This method, very similar to the previous one, considers only the periods when the returns are below the mean to estimate the variance of returns.

### *Exponentially weighted moving average (EWMA)*

The previous methods gave the same weights to all observations, while this method assigns weights differently for each observation and as such, it gives more weight to more recent observations. This method to estimate volatility was initially proposed by JP Morgan under the trademark RiskMetrics®.

### *Estimating the tangency portfolio through resampling*

The previous three and perhaps more traditional methods suffer from what is usually known as sampling error. Due to the fact that optimization inputs are measured with error, optimization results tend to over-weight assets with high recent returns (leaving aside reversion to the mean features of asset

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returns) and with low covariances and correlations that do not necessarily hold during the investment period. This fourth method allows quantifying the impact of sampling error using the related concept of portfolio resampling (see Michaud, 1998).

Initially this method requires an estimate of  $V_t$  (e.g. historical approach). Then, the portfolios of minimum risk (Q) and maximum return (R) in the efficient frontier are identified. Next, the method requires analyzing a series of points equally distanced (in terms of returns) that lie in the efficient frontier between Q and R. In this study, we used 500 points or portfolios on the efficient frontier.

Then a random sample of returns is obtained (e.g. assuming that returns follow a multivariate normal distribution) that permits estimating the vector of expected returns and  $V$ . With this new vector and new matrix the optimization exercise is repeated giving as a consequence a new efficient frontier.

This simulation procedure is repeated a significant number of times, thus obtaining a large number of efficient frontiers. Then at each level of returns between Q and R, the weights suggested by the different optimizations are averaged and subsequently a new “average” or resampled efficient frontier is built. Finally, with this resampled efficient frontier we find the tangency portfolio as the one that maximizes the return to risk ratio.

## **Methodology**

In this section we discuss in depth the estimation of the dynamic tangency portfolio constructed using investments in stock indices of seven Latin American countries.

### *Data*

The return series were estimated using MSCI price indices in US dollars from Datastream of the stock markets of Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela for the period September 1999 to December, 2006 for a total of 382 weekly observations. We used as the risk free rate the 3-month Treasury Bill rate (secondary market) reported by the Federal Reserve.

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To estimate the dynamic tangency portfolios a weekly frequency was used since it reflects a reasonable compromise between the high costs of daily portfolio rebalancing and the relative limited information when monthly returns are chosen.

In short, Colombia, Mexico and Peru dominated the largest number of countries in the sample and Venezuela and Argentina had the worst performance in terms of dominance. Perhaps Chile and Brazil are “in between” markets which dominated the two weakest markets. However, Chile showed a much lower risk as well as a lower coefficient of variation than Brazil (in fact Chile had the four lowest coefficient of variation among the seven countries in the sample).

#### *Estimation of dynamic tangency portfolios*

We used a rolling window technique to obtain different values of the variance covariance matrix and the vector of expected returns, and consequently different estimates of the optimal portfolio weights that update as new information (regarding returns and covariances of Latin markets) arrives. The fixed size of the estimation window was 104 weeks (2 years) and thus 174 estimations of the optimal weights were obtained beginning in September, 2001 and ending in December, 2004.

#### *Performance analysis in the out-of-sample period*

Taking into account that one of the purposes of this paper is to analyze the efficacy in terms of risk and returns of efficient (optimized) portfolios, an out of sample analysis was conducted using the last two years of the sample (2005 and 2006).

More specifically, this section analyzes what would have been the return and risk for an investor rebalancing its portfolio according to the optimal weights suggested by the optimization exercise. Furthermore this section compares the performance of these optimized portfolios to that of an equally weighted portfolio. We tested for statistically significant differences in the Sharpe ratios of several pairs of portfolios and examined second order stochastic dominance.

#### *Stationarity tests on the time series of optimal weights per country*

Due to the fact that the previous analysis allows us to construct seven time series (weekly frequency) of portfolio weights for the countries in the sample,

we conducted stationarity tests on these series of optimal weights to check if there are mean reversion effects in the composition of optimal Latin American stock portfolios.

From a practical point of view the existence of stationarity in one of the series would imply, for instance, a lower need of portfolio rebalancing with respect to a particular country investment. The aforementioned, since one can expect short term variations in the portfolio weight allocated to a certain country, but in the long run, this portfolio weight would exhibit a tendency to return to its mean value.

## **Results and conclusions**

In this paper, we analyzed the composition of dynamic tangency portfolios invested in the stock indices of the seven most representative stock markets in Latin America both for an in-sample period (September 2001 – December 2004) and an out of sample period (2005-2006).

An historical variance covariance matrix, a semivariance semicovariance matrix, an exponentially weighted moving average to estimate variance and covariance terms as well as portfolio resampling techniques were used to derive the composition of these dynamic tangency portfolios.

By and large, the optimal weights suggested by the first three methods were quite similar whereas the weights suggested by portfolio resampling were more stable (not necessarily stationary). Furthermore, this last technique allowed a higher degree of diversification (minimizing extreme positions in both high and low weight stock markets). These two characteristics of resampling (stability and diversification) can be very attractive for a portfolio manager since they add practical value to the optimization exercise and entail significant transaction cost savings since the need for portfolio rebalancing decreases.

In regards to portfolio performance during the out of sample period, the results in terms of Sharpe ratios point to no superior performance of optimized versus equally weighted portfolios (naïve diversification). However, the results when measuring performance using a second order stochastic dominance criterion provide some evidence in favor of resampled portfolios (Michaud, 1998) in lieu of portfolios using more conventional optimization techniques ( historical variance covariance matrix and the semivariance semicovariance matrix).

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A possible extension of this paper would be to work with multivariate GARCH models to obtain forecasts of the variance covariance matrix and thus of optimal portfolios weights and then compare the time stability and performance of these tangency portfolios to that of the portfolios analyzed in this paper. An additional extension would be to work with alternative utility functions (by assumption we worked with a quadratic utility function as in Markowitz (1952)) such as an exponential utility function that is frequently used in more recent literature related to portfolio optimization. This would allow further analyzing the differential impact of using resampling instead of more traditional techniques in obtaining optimal portfolios.

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## CAPITAL STRUCTURES IN DEVELOPING COUNTRIES: THE LATIN AMERICAN CASE

CHRISTIAN ESPINOSA, UNIVERSIDAD SANTO TOMÁS Y UNIVERSIDAD DIEGO PORTALES, CHILE  
christian.espinosa@udp.cl

CARLOS MAQUEIRA, UNIVERSIDAD SANTO TOMAS, CHILE  
cmaqueira@santotomas.cl

THIS WORK WAS PRESENTED AT THE LATIN AMERICAN RESEARCH CONSORTIUM  
AND DEAN'S WORKSHOP (LARC)

FINANCE RESEARCH WORKSHOP PRESENTATION  
NEW ORLEANS, LA, UNITED STATES  
MARCH, 2009

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### **Abstract**

Using a sample of 609 firms from Argentina, Chile, Mexico, Peru and United States, we study if there are common determinants of the capital structures among these countries. We first consider the methodology proposed by Rajan and Zingales (1995) and we extend the work done by Booth, Aivazian, Dmirguc-Kunt and Maskimovic (2001) and Chang (2004). Despite we use another sample and a different time period from the one employed by Rajan and Zingales, we report similar results. However, we do not find concluding results for the Latin American sample.

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As a second step we solve the endogenous problem reported by Rajan and Zingales with panel data using the generalized method of moments. The results for USA do not change using this methodology. However, we find for Chile very similar results compared to USA. Finally, for Argentina and Mexico we can partially explain the capital structure with the determinants employed by Rajan and Zingales.

## **Keywords**

Capital Structure, Tobit Model, Panel Data, Generalized Method of Moments.

## **Introduction**

Our main objective is to find out if the determinants of the capital structure proposed by Rajan and Zingales (1995) to explain the financial leverage for the developed G-7 countries (the United States, Japan, Germany, France, Italy, the United Kingdom, and Canada) can be also applied to Latin American countries. We know of only one paper published after Rajan and Zingales that employs the same determinants to explain the capital structures for developing countries [Booth, Aivazian, Dmirguc-Kunt and Maskimovic (2001)]. Unfortunately, this last article is not able to include Latin American countries since the authors do not count with the stock market data for the Latin American firms. We have this information for a representative sample of firms from Argentina, Chile, Mexico and Peru for the last decade (1998-2007). Since we do not know of any paper that attempts to update the paper done by Rajan and Zingales, we take a different sample of firms from USA and also another period of time to see if the results obtained previously are still true. This also allows us to compare the USA results with our sample of Latin American countries.

When we run Rajan and Zingales model using the same statistical procedure to estimate the coefficients of the dependent variables, we find very similar results for USA to the one reported by these authors. On the other hand, we do not find concluding results for the Latin American countries.

As a second step, given the small sample of firms from Latin America, we use panel data with the generalized method of moment proposed by Arellano

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and Bond (1991) to estimate the coefficients of the dependent variable. We still find the same results reported by Rajan and Zingales for USA in 1995. However, this time the results for Latin America are more near to the ones obtained for USA. Chile and USA show very similar results. On the other hand, for Argentina and Mexico we can partially explained the capital structures with the model. Peru shows very poor results.

We organize this article in four sections. In the first one, we review the international evidence on this topic. In the second section, we describe the sample and we do a statistical analysis of the data. In section three, we explain the methodology and we report the most important results. In the final section we conclude the study.

### **International evidence**

We can find hundreds of papers written on corporate capital structure decision, however there are only two papers that shed some lights on common determinants of the capital structures for different countries. Rajan and Zingales (1995) analyze a sample of 3,569 firms from United States, Japan, Germany, France, Italy, United Kingdom and Canada during 1987-1991. They consider four common determinants of the capital structures of the firms across these countries: tangible assets (tangibility), market to book ratio (growth opportunities), log sales (size) and return on assets (profitability). They use two measures of leverage (book leverage and market leverage). Tangibility is always positively related with leverage in all countries. The market-to-book ratio shows a negative coefficient in all countries. Size is positively correlated with leverage except in Germany. Finally, profitability is negatively related with leverage in all countries except Germany. Booth, Aivazian, Dmirguc-Kunt and Maskimovic (2001) study a sample of 631 firms from ten emerging markets in the time period 1980-1990. Among those countries they consider Brazil and Mexico, however they are not able to compute both the market leverage and the market-to-book ratio since they did not have the stock market data in their dataset. Since, they have few firms for some countries and time periods, they use panel data techniques within each country. They run an unbalanced panel with fixed effect. Unfortunately, this method does not solve the endogeneity problem since it considers the explanatory variables as exogenous. Since we

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use a different econometric method, using dynamic panel data, we solve this problem. Furthermore, they also include average tax rate and business risk as explanatory variables, which do not allow comparing with the results reported by Rajan and Zingales. Apart from the profitability proxy, the regression coefficients differ across countries, both in size and sign.

Chen (2004) concentrates on 88 Chinese-listed companies for the period 1995-2000. A sample of Chinese firms was not considered before in the literature. Chen uses panel data with random effects which is quite appropriate from a statistical view point. However, he is able to work just with book leverage which is one of the limitations of his research. He finds that book leverage is positively related to growth opportunities, size and tangibility. On the other hand, it is negatively related to profitability. We would have expected a negative relation between leverage and growth opportunities but it turns out to be positive. This last result is unexpected considering most of the Western empirical literature on this area. The exception is Wald (1999), which is more consistent with Ross (1977) signaling hypothesis. Ross would suggest that firms with higher expected cash flows due to high growth opportunities should have higher leverage to signal the higher future cash flows. The high market capitalization in China may indicate that the growth opportunities associated to listed firms have been recognized by the capital market, banks are willing to assign higher valuations to highly levered firms. He claims that the capital structure decision of Chinese companies seems to follow a “new Pecking order”-retained profit, equity and long-term debt. Institutional factors in China are more important than firm-specific factors to explain the capital structure decision made by firms.

In the case of Latin America, we have countries that have moved from being intensive in the use of banking financing compare to public market financing. Then the question is whether the capital structure decision made by firms is more consistent with either banking oriented systems or public market focused systems in the last decade. Moreover, we do not find any paper that employs the model proposed originally by Rajan and Zingales to observe if the determinants found by them for the G-7 countries are also present in the case of Latin American countries. Chang and Maqueira (2001) exceptionally analyze the same determinants proposed by Rajan and Zingales for the capital structure for a sample of thirty two Latin American companies (Argentina,

Brazil, Chile, Mexico and Venezuela) that issued ADRs between 1990 and 1994 in NYSE. They find similar results to the ones reported by Rajan and Zingales in three of the four determinants. Tangibility shows to be statistically significant but with an unexpected negative relation with the leverage.

Maquieira, Olavarrieta and Zutta (2007) study the determinants of the capital structure for Chile using the methodology (LISREL) and the determinants proposed by Titman and Wessel (1988). Maquieira et.al analyze a sample of 113 firms listed in the Santiago Stock Exchange Market (Bolsa de Comercio) in the period 1990-1998. They report a negative relation between leverage and profitability and a positive relation between tangibility and leverage. The major difference between this last study and the previously done is the use of LISREAL instead of OLS to estimate the model. Since, tangibility and profitability show statistically significant coefficients then we think that there are good possibilities in using Rajan and Zingales model to explain the capital structure in Chile.

## Data and methodology

Most of the data comes from *Economática*. We also obtain information from Bloomberg regarding number of shares outstanding and stock prices. We analyze the last decade (1998-2007) for Argentina, Chile, México and Perú. The selection criteria are as follow:

- The stock is actively traded during 2007.
  - The firm has market and accounting information available for at least eight of the ten year analyzed.
  - The firms that have ratios undefined or very close to it are eliminated from the sample.
  - The firms that belong to the financial and investment sectors are eliminated since they have very different accounting reports.
  - Firms from Colombia and Venezuela are eliminated since they are very few firms.
  - The firms from Brazil are eliminated since most of them have very few market information.
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The final sample also includes USA to compare the results with Rajan and Zingales. In Table I we show descriptive statistics of the final sample and it can be observed we have companies of very different size, avoiding size bias. Perú has the smallest sample (19 firms) and USA is the biggest sample (466 firms). Measuring representativeness of the sample for each country in terms of total assets and listed firms in each country we can claim that we have a relatively good representation of each one of them.

**Table 1.** Descriptive statistics in thousands of dollars)

Country	Time Period		Total Assets	Equito	EBITDA	Fixed Assets	Net Sales
USA	1998-2007	Total	50.623.522.003	16.475.800.795	6.165.724.311	16.612.794.618	31.141.270.717
		Mean	10.924.368	3.555.417	1.344.467	3.564.467	6.725.976
		Median	2.966.834	1.212.796	359.526	724.992	1.741.922
	2004-2006	Total	23.455.156.338	7.854.001.430	3.006.518.810	7.462.734.930	14.777.162.274
		Mean	12.583.238	4.218.885	1.623.390	4.003.613	7.927.662
		Median	3.510.839	1.439.499	436.944	806.559	2.137.657
Argentina	1998-2007	Total	372.046.762	186.070.846	75.452.055	246.096.544	189.096.226
		Mean	1.617.595	809.004	333.859	11.069.985	825.748
		Median	629.099	291.263	63.571	380.838	244.439
	2004-2006	Total	131.503.140	65.814.274	30.547.165	84-089.365	81.119.170
		Mean	1.429.382	715.373	335.683	914.015	881.730
		Median	550.897	264.939	56.772	341.268	217.384
Chile	1998-2007	Total	719.205.619	311.028.163	76.412.598	464.123.640	366.546.524
		Mean	1.438.411	622.056	152.056	928.247	734.562
		Median	514.705	281.471	41.795	235.178	281.174
	2004-2006	Total	305.846.964	141.954.461	35.271.974	194.237.024	173.531.649
		Mean	1.529.235	709.772	176.360	971.185	867.658
		Median	533.833	296.591	51.785	230.280	330.179
México	1998-2007	Total	1.460.749.349	552.746.348	269.003.977	780.190.227	973.515.351
		Mean	3.562.913	1.348.162	656.107	1.902.903	2.386.067
		Median	1.576.847	667.211	177.540	678.024	1.193.614
	2004-2006	Total	651.114.080	248.531.564	119.678.038	3289.889.671	412.257.092
		Mean	3.970.208	1.515.436	729.744	2.005.425	2.513.763
		Median	1.775.613	719.488	185.088	676.216	1.371.033
Perú	1998-2007	Total	96.594.814	52.298.165	15.581.596	57.810.039	39.196.557
		Mean	508.394	275.254	88.532	304.263	209.607
		Median	306.164	185.456	40.643	159.716	93.755
	2004-2006	Total	38.755.234	21.293.289	7.491.643	22.362.539	16.914.608
		Mean	509.938	280.175	98.574	294.244	225.528
		Median	303.636	190.471	56.368	183.613	132.674

We have a good representation of the data available in *Economática*. In terms of total assets our final sample represents 29 percent, 39 percent, and 58 percent of total assets for USA, Chile and Mexico respectively. Looking at listed firms, our sample is also a good representation of the market in each country- 29 percent for USA, 23 percent for Chile and 33 percent for México.

We first use the methodology proposed by Rajan and Zingales. They consider four determinants of the capital structure- tangibility (book value of fixed assets

over book value of total assets), growth opportunity (market value of assets over book value of assets), size (log of net sales) and performance (EBITDA over book value of assets). Despite in the literature we can find other variables to explain the capital structure, there are two limitations to include them-the four determinants chosen are consistently significant in most the studies and we do not have data available for each country to build other determinants.

We expect a positive relation between tangibility and financial leverage, since fixed assets serve as collateral, reducing the debt agency cost. Furthermore, in case of liquidation, most of fixed assets can be sold in the market more easily than intangible assets. On the other hand, the bigger growth opportunities the lower the financial leverage. This is since the underinvestment hypothesis proposed by Myers (1977). A firm with high growth opportunities will prefer to first use internal cash flows to finance them. The relation between size and leverage is more ambiguous. A bigger firm is normally more diversified and then the lower the asset risk which implies a lower bankruptcy risk and therefore it is able to take more debt. On the other hand, a bigger firm will provide more public information to minority shareholders and then we would expect more preference for equity. However, we find in previous studies a positive relation between size and leverage.

Finally, performance may be either positively or negatively related to leverage. According to Myers and Majluf (1984) we would expect a negative relation between both variables but following Jensen (1986) we could expect a positive relation since it will diminish agency costs. Modigliani and Miller (1963) also would predict a positive relation between performance and leverage since the value associated to the debt-tax shield.

In summary the model to estimate is as follows:

$$Levi = \alpha + \beta_1 \text{ Tang. Assets } i + \beta_2 \text{ Market to Book } i + \beta_3 \text{ Log(Sales) } i + \beta_4 \text{ Ret. on Assets } i + \varepsilon_i$$

Where: *Lev* corresponds to either Debt over Book Value of Equity (Book Leverage) or Debt over Market Value of Equity (Market Leverage); *Tang. Assets* corresponds to Book Value of Tangible Assets over Book Value of Total Assets; *Market to Book* is measured as Book Value of Debt plus Market Value of Equity over Book Value of Total Assets; *Log(Sales)* corresponds to

the natural logarithm of net sales; *Ret. on Assets* corresponds to EBITDA over Book Value of Total Assets.

To compute all the explanatory variables we use the average of four years (2003-2006). Leverage on the other hand is adjusted by capitalization in 2007. The regression is estimated for each country using the Tobit model. These results are also compared to the ones obtained from OLS.

## Analysis of results

### *Descriptive Statistics*

Table 2 shows descriptive statistics for each country. We focus on the Latin American countries since the results for USA are very similar to the ones reported by Rajan and Zingales. In general if we look at either the mean or the median we find very similar ratios. The only exception is Peru when we measure market-to-book ratio which mean and median is 2.22 and 0.93 respectively. Considering the mean, the highest book leverage comes from Mexico (54 percent) and the lowest corresponds to Peru (43 percent). Looking at market leverage the highest one correspond to Mexico (52 percent) and the lowest to Chile (43 percent).

**Table 2.** Mean and median variables

Country	Time Period		Tang Assets	Market to Book	Log(Sales)	Ret. on Assets	Book Lev.	Market Lev.
USA	1998-2007	Mean	0,31	2,05	6,22	0,12	0,55	0,41
		Median	0,24	1,43	6,25	0,13	0,57	0,39
	2004-2006	Mean	0,30	1,96	6,34	0,13	0,55	0,38
		Median	0,23	1,55	6,33	0,13	0,56	0,35
Argentina	1998-2007	Mean	0,55	1,03	5,35	0,15	0,49	0,52
		Median	0,59	0,95	5,42	0,13	0,51	0,53
	2004-2006	Mean	0,53	1,15	5,32	0,17	0,48	0,46
		Median	0,59	1,06	5,34	0,14	0,48	0,47
Chile	1998-2007	Mean	0,53	1,30	5,42	0,12	0,44	0,43
		Median	0,51	1,08	5,45	0,11	0,44	0,42
	2004-2006	Mean	0,52	1,53	5,53	0,13	0,43	0,34
		Medium	0,49	1,26	5,52	0,11	0,45	0,32
México	1998-2007	Mean	0,47	1,41	5,98	0,14	0,54	0,52
		Median	0,52	1,07	6,08	0,13	0,55	0,51
	2004-2006	Mean	0,44	1,30	6,01	0,14	0,55	0,50
		Median	0,49	1,13	6,14	0,13	0,55	0,50
Perú	1998-2007	Mean	0,57	2,22	5,03	0,17	0,49	0,46
		Median	0,61	0,93	4,98	0,13	0,42	0,44
	2004-2006	Mean	0,57	2,37	5,10	0,20	0,44	0,42
		Median	0,60	1,09	5,14	0,16	0,43	0,42

Table 3.

USA	Tang Assets	Market o Book	Log (sale)	Ret on Assets	Book Lev	Market Lev.
Tang Assets	1					
Market to Book	-0,353	1				
Log (sale)	0,140	-0,189	1			
Ret On Assets	0,176	0,020	0,229	1		
Book Lev.	0,150	-0,176	0,289	-0,286	1	
Market Lev	0,252	-0,500	0,370	-0,251	0,686	1

Argentina	Tang Assets	Market o Book	Log (sale)	Ret on Assets	Book Lev	Market Lev.
Tang Assets	1					
Market to Book	0,216	1				
Log (sale)	0,548	0,620	1			
Ret On Assets	0,036	0,695	0,534	1		
Book Lev.	0,360	0,086	0,394	-0,241	1	
Market Lev	0,272	-0,474	0,003	-0,552	0,664	1

Chile	Tang Assets	Market o Book	Log (sale)	Ret on Assets	Book Lev	Market Lev.
Tang Assets	1					
Market to Book	-0,133	1				
Log (sale)	0,195	-0,039	1			
Ret On Assets	0,116	0,351	-0,043	1		
Book Lev.	-0,013	-0,169	0,461	-0,036		
Market Lev	0,039	-0,421	0,191	-0,405	0,723	1

México	Tang Assets	Market o Book	Log (sale)	Ret on Assets	Book Lev	Market Lev.
Tang Assets	1					
Market to Book	0,104	1				
Log (sale)	0,284	0,456	1			
Ret On Assets	0,367	0,285	0,306	1		
Book Lev.	-0,244	0,028	-0,097	-0,133	1	
Market Lev	-0,171	-0,550	-0,255	-0,379	0,564	1

Perú	Tang Assets	Market o Book	Log (sale)	Ret on Assets	Book Lev	Market Lev.
Tang Assets	1					
Market to Book	-0,372	1				
Log (sale)	-0,155	0,052	1			
Ret On Assets	-0,426	0,606	0,036	1		
Book Lev.	0,230	-0,319	0,267	0,015	1	
Market Lev	0,536	-0,701	0,106	-0,538	0,631	1

Peru shows a high ratio in tangible asset (57 percent) and Mexico has the lowest one (47 percent). Peru reports the highest growth opportunity ratio

(2.22) and Argentina shows the lowest one (1.03). Mexico reports the biggest firms (5.98) and Peru the smallest firms (5.03). The most profitable firms are in Peru (17 percent) and the poorest belong to Chile (12 percent).

We also compute the correlation among the variables for each country. USA show similar results in both magnitude and sign compare to the results reported by Rajan and Zingales. This would indicate that the results reported by Rajan and Zingales have not change in the last decade.

Table 3 shows the simple correlation matrix between variables for each country employed in the study, using the ten year time period.

When we compare between USA and Latin America, we find very similar results between USA and Chile, except for the correlation between book leverage and tangibility. In the case of USA is positive (0.15) and in Chile is negative (-0.013), but this last correlation is not significant. When we look at market leverage, the signs are similar between USA and Latin American, except for Mexico.

### ***Econometric Analysis***

We first use the estimation procedure proposed by Rajan and Zingales to compare the Latin American results with USA. Therefore, we estimate the regression using maximum likelihood and censored Tobit model. The leverage is computed for 2007 and for the rest of the variable we use the average of four years (2003-2006). As in Rajan and Zingales, we report in Table 4, Panel A the results using book leverage and in Panel B you can observe the results using market leverage.

In Table 4 the factors correlated with book capital and market capital are shown. In panel A the dependent variable is book leverage which is adjusted debt to adjusted debt plus book value of adjusted equity 2007. In panel B the dependent variable is market leverage which is adjusted debt to adjusted debt plus market value of adjusted equity in 2007. All the explanatory variables are four years average (2003-2006). The regression includes an intercept whose coefficient is not reported. The regression is estimated using maximum likelihood and a censored Tobit model on equation (1).

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**Table 4.** Factors correlated with book capital and market capital

	United States	Argentina	Chile	México	Perú
<b>Panel A: Book Capital</b>					
Tang Assets	0,154***	-0,020	-0,121	-0,205	0,202
	5,14	-0,17	-1,03	-1,28	1,04
Market to Book	-0,019**	0,064	-0,032***	0,031	-0,034*
	-2,08	0,80	-2,65	0,79	-1,70
Log (sale)	0,119***	0,116***	0,142***	-0,017	0,122***
	9,69	3,08	3,49	-0,37	2,85
Ret. on Assets	-0,780***	-1,077***	0,138	-0,191	0,604*
	-6,23	-3,04	0,47	-0,32	1,75
Number of observations	466	23	50	41	19
R-squared	0,23	0,45	0,26	0,07	0,31
<b>Panel B: Market Capital</b>					
Tang. Assets	0,108***	0,079	-0,002	-0,046	0,200**
	3,24	0,83	-0,02	-0,43	2,16
Market to Book	-0,063***	-0,180*	-0,051***	-0,160***	-0,031***
	-6,63	-1,71	-3,42	-4,05	-3,83
Log (sale)	0,101***	0,083***	0,048	0,018	0,059
Ret on Assets	-0,699***	-0,764**	-0,572*	-0,690	-0,092
	-7,05	-2,34	-1,81	-1,53	-0,56
Number of observations	466	23	50	41	19
R-squared	0,44	0,53	0,28	0,36	0,62

\*, \*\*, and \*\*\*, significant at the 10, 5, and 1 percent level, respectively

Our results for USA are very similar compared to the ones reported by Rajan and Zingales. However, in the case of Latin America the results are despaired. Using book leverage, we are not able to find any statistically significant coefficient for the case of Mexico. The rest of the countries show two coefficients to be statistically significant and we the same sign observed for USA. The coefficient for size is positive and statistically significant in each country, except for Mexico. This suggests that bigger firms hold higher book leverage.

Using market leverage, we also find similar results for USA compared to Rajan and Zingales results. Mexico shows for market-to-book ratio a negative and statistically significant relation with leverage, for the rest of the variables the coefficients are not statically significant. The coefficient for size is only significant for Argentina. The coefficient for market-to-book ratio is statistically significant in each country and has a negative sign. This suggests that the higher the growth opportunities the lower the market leverage.



In summary, the evidence reported by Rajan and Zingales is confirmed for USA, using a different sample and time period. However, for Latin America we do not have concluding results.

We have two potential explanations for the results obtained for Latin America. First, we have small samples in each country. Second, Rajan and Zingales solve the endogeneity problem using the average of four years for the explanatory variables. In fact, the average may not be a good proxy to measure the variable in an emerging market and therefore the results are different.

Following Arellano and Bond (1991), we estimate the model with a dynamic panel using the generalized method of moments (GMM) in two steps for the time period 1998-2007. Arellano and Bond propose GMM, using the lags of the variables to solve the endogeneity problem. According to Azofra, Saona and Vallelado (2004), GMM can control for correlation between the errors through time, the heteroscedasticity among companies, the simultaneity and measurement errors driven by the orthogonal condition of the variance matrix.

We find similar results for USA, except for the coefficient of return-on-assets which is statistically significant at the 5 percent level. This occurs when we use market leverage.

In Table 5 the factors correlated with book capital and market capital are shown. In panel A the dependent variable is book leverage which is computed for each firm and for each year during the ten year period (1998-2007). In panel B the dependent variable is market leverage which is computed for each firm and for each year during ten years. All the explanatory variables are computed for each firm and year in the ten year period of time. The regression includes an intercept whose coefficient is not reported. The dynamic panel data is estimated using GGM in two steps following Arellano and Bond (1991).

In the case of Latin America, Chile shows very similar results compared to USA. In fact, if we use market leverage every single coefficient is statistically significant at 1 percent. For Mexico we report similar results except for the coefficient of size which is not statistically significant. For Argentina and Peru we find only two coefficients to be statistically significant. A common results

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**Table 5.** Factors correlated with book capital and market capital

	United States	Argentina	Chile	México	Perú
<b>Panel A: Book Capital</b>					
Tang Assets	0,672**	0,124***	0,277**	0,015	0,363**
	2,14	4,11	2,39	0,61	2,62
Market to Book	-0,018*	-0,025*	-0,006***	-0,007***	-0,003
	-1,84	-1,86	-3,73	-2,72	-0,18
Log (sale)	0,352***	0,047	0,225***	0,078***	0,087
	5,61	0,88	7,46	10,53	0,88
Ret. on Assets	-0,180**	-0,135**	-0,214	-1,392***	-0,139
	-2,18	-2,02	-1,95	-27,50	-1,22
Number of observations	466	23	50	41	19
Sargan Test	36,06**	19,26**	24,80**	36,40**	7,12**
<b>Panel B: Market Capital</b>					
Tang. Assets	0,922***	0,212	0,251**	0,104***	1,305**
	3,84	0,69	3,04	2,81	2,06
Market to Book	-0,027***	-0,146***	-0,008***	-0,130***	-0,028**
	-6,10	-2,95	-3,98	-10,17	-2,01
Log (sale)	0,193***	-0,006	0,328***	0,014	0,075
	3,27	-0,09	11,43	0,53	0,28
Ret on Assets	-0,114**	-0,574**	-0,580***	-1,985***	-0,040
	-2,30	-2,03	-4,44	-16,35	-0,10
Number of observations	466	23	50	41	19
Sargan Test	37,33**	14,35**	17,40**	30,56**	6,45**

\*, \*\*, and \*\*\*, significant at the 10, 5, and 1 percent level, respectively.

among the countries is that the higher the growth opportunities the lower the leverage, except for Peru when we use book leverage. This may be due to the difference between the mean (2.22) and the median (0.93) for the proxy of growth opportunities in that country. A similar result is obtained when we look at return-on-asset.

The coefficients are negative and statistically significant in each country except for Peru using both measures for leverage. Finally, we run the Sargan test and we are able to say that the instrumental variables are well chosen and the model is well specified. The results are robust from a statistically point of view.

### Concluding remarks

We study the determinants of the capital structure for Latin American countries following the original work done by Rajan and Zingales. In doing so, we have

a sample of 143 Latin American firms using accounting and stock exchange information for the time period 1998-2007. We study Argentina, Chile, Mexico and Peru. Furthermore, we include a sample of 486 firms from USA for the same time period in order to compare with the results reported by Rajan and Zingales.

Using Rajan and Zingales methodology, we find very similar results for USA not only for a different group of firms but also for a different time period. However, in the case of Latin America we find despair results and we are not able to conclude that USA firms and Latin American firms have common determinants of the capital structure. Considering the small sample of Latin American firms and also the particular methodology employed by Rajan and Zingales to solve the endogeneity problem, we employ an alternative methodology to estimate the model.

We use dynamic panel data using the GMM in two steps according to the methodology proposed by Arellano and Bond (1991) in the time period 1998-2007. The results for USA do not change using this methodology. However, in Latin America, Chile has the most similar results when we compare with USA. Argentina shows three of the four coefficients to be statistically significant when we use book leverage and two coefficients using market leverage. This is also true for Peru but for market-to-book ratio and tangible assets.

In synthesis, using panel data to correct for endogeneity and for a longer time period (ten years) we find that the financial leverage of Latin American firms have similar determinants compare to USA. This may due to the development of the capital markets of the last ten years in Latin America. We observe an increasing number of firms that are listed in the stock market and more actively trade and therefore the firms have developed financial policies to respond consistently to outsiders. On other hand, we can expect that the results in the future will become even more similar between USA and Latin America since the increasing integration of the capital markets among these countries.

Finally, and not less important, the results obtained by Rajan and Zingales for USA thirteen years ago are still true, despite we use a different sample of USA firms and a another time period. The model is so robust that even employing an alternative econometric technique, to solve estimation problems, the results hold.

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# PERFORMANCE EVALUATION, FUND SELECTION AND PORTFOLIO ALLOCATION APPLIED TO COLOMBIA'S PENSION FUNDS

LUIS BERGGRUN, UNIVERSIDAD ICESI, COLOMBIA  
lberggru@icesi.edu.co

FERNANDO JARAMILLO, STUDENT FROM MASTER FINANCER PROGRAM  
AT UNIVERSIDAD ICESI, COLOMBIA  
fejarami@yahoo.com

THIS WORK WAS PRESENTED AT THE LATIN AMERICAN RESEARCH CONSORTIUM AND DEAN'S  
WORKSHOP (LARC)

FINANCE RESEARCH WORKSHOP PRESENTATION  
NEW ORLEANS, LA, UNITED STATES  
MARCH, 2009

## Introduction

Colombia has both mandatory and voluntary pensions. Under the mandatory system, there are two affiliation alternatives, the first known as Individual Savings with Solidarity regime (e.g. defined contribution) in which an affiliate has the option of an early retirement if the accumulated capital in her account is able to finance monthly payments equivalent to 110% of the minimum monthly wage. This type of affiliation is run by non-government AFPs. Pensions administered by AFPs rely on the capital contributed as well as the yields

on these investments. By Law, these funds are obliged to secure a minimum return and if there is any extra return this goes completely to the affiliates' benefit and not the AFPs'.

The second type is a defined benefit system (administered by the State through the I.S.S.) where the affiliate must contribute during a minimum weeks and comply with age requirements, in order to be entitled to receive a pension.

In Colombia, individuals opt for a voluntary pension plan namely for two reasons. The first one deals with an increase of personal savings and the second is related with taking advantage of the non-taxation (or tax differing) of income.

The study of voluntary pension funds in Colombia is scant. The main contribution of this document is, in addition of studying performance of mandatory pension funds, to analyze performance of the most representative voluntary pension funds as well as to propose a methodology to select assets. In addition, we analyze setting up efficient portfolios according to the traditional methodology by Markowitz (1952) and an alternative approach by Reveiz et al. (2008) to verify the possible evidence of improvements in portfolio performance when using a particular approach.

## **Literature review**

Markowitz (1952) as the forefather of modern investment theory proposed an optimal portfolio in terms of the mean and variance of assets' returns. Reveiz et al. (2008) in their paper "Efficient portfolio optimization in the wealth creation and maximum drawdown space", criticize Markowitz's methodology since portfolio weights are very sensitive to optimization inputs, sometimes allocations can be counter – intuitive and due to the difficulties in forecasting the variance covariance matrix.

The article proposes a risk measure related to that of Roy (1952), which tries to capture extreme portfolio losses and it complies with several desirable characteristics in any given risk measure and in particular its asymmetric treatment of negative and positive returns and sub - additivity.

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The risk measure is known as the maximum drawdown that can be understood as the worst percentual change in an assets' price from its maximum (max) to its bottom in a particular period (t).

The maximum drawdown (MDD) can be estimated recursively given a price series P as the minimum (min) of:

$$MDD_{[0,t]} = \min \left( \frac{P_t - P_{\max}}{P_{\max}}, MDD_{[0,t-1]} \right) \quad (1)$$

As an alternative to the mean variance (MV) optimization, Reveiz and Leon propose to maximize the cumulative return (or wealth creation according to the authors) to drawdown in what is usually known as the Calmar ratio. They solve an optimization problem with eighteen assets and notice that the estimated frontier shares some similarities to Markowitz's frontier and report diversification benefits (while taking into account extreme events) when including more assets in the frontier.

## Data and methodology

### Data

This study uses weekly unit fund values in pesos from September, 2004 to September, 2008 of 7 mandatory pension funds. The weekly unit fund value from September 2004 to June 2008 of 23 and 13 funds (portfolios or investment alternatives) offered by voluntary pension funds Protección and Skandia<sup>5</sup> respectively comes from companies' websites. As a risk free rate we chose the interbank rate.

### Performance evaluation of funds

This section uses several measures found in the literature that not only measure performance in terms of returns but also account for risk. The performance measures are Sharpe ratio, lower partial moments, maximum drawdown and second order stochastic dominance.

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5. As of October, 2008, these two funds had a combined 66% market share.



## **Fund or asset selection through principal components analysis**

Frequently, voluntary pension funds affiliates can choose among an ample selection of funds that sometimes show a high degree of similarity and correlation, making it difficult to pick a particular fund.

We conducted a principal component analysis on the correlation matrix of returns of Protección and Skandia funds. Principal components associated with eigenvalues above one were retained and the correlation of funds returns and principal components was analyzed.<sup>6</sup>

## **Portfolio allocation analysis**

With the funds chosen in the last section, we proceeded to attain optimal portfolios through two methodologies: the first related to Markowitz (1952) and a second methodology by Reveiz and Leon (2008).

If persistence effects are present in the data or in other words optimal portfolios are subject to momentum (Jegadeesh and Titman, 1993), one would expect that high ex-ante or historical returns portfolios (high up in the frontier) would show a better performance on a subsequent period. Furthermore, we analyzed the ex-post return series (weekly averages) of the portfolios under the two optimization methodologies to verify any performance improvement when using one particular approach. Likewise, in a robustness analysis, this exercise was replicated for different windows from 28 and up to 52 weeks.

## **Results**

### ***Performance analysis of mandatory pension funds***

A second order<sup>7</sup> stochastic dominance and performance analysis was conducted an matching in good part the descriptive statistics analysis. In addition, in unreported results, the risk free rate was nor dominant nor dominated by the funds' returns.

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6. Since selecting a given number of principal components did not reduce the number of funds, we resorted to a correlation analysis between the funds' returns and principal components to find the funds more strongly correlated with linear combinations of the whole set of funds.

7. This paper omits a first order stochastic dominance analysis since often times the cumulative probability functions crossed preventing the existence of dominance.

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In regards to performance analysis taking into account risk, looking at the evolution of Sharpe's ratio one notices an increasing trend for the first 30 weeks, followed by a decreasing trend reaching a minimum in July 2006 and then a recovery until the end of 2006. During 2007 and 2008 (week 97 onwards), this indicator has been erratic and more importantly, in several occasions turned out to be negative.

The zero partial moment has changed from levels of 10 to 20% from March-September of 2005 to levels of 60% in June-July of 2008.

Given negative returns, the first partial moment informs the size of the expected percentage loss. At the beginning of the sample, expected loss was moderate and later the expected loss grows considerably until reaching a maximum of 0.6% in July-August, 2006. Maximum drawdown showed a similar behavior to that of the first partial moment.

### **Performance evaluation, fund selection and portfolio allocation applied to Proteccion's voluntary pension fund<sup>8</sup>**

#### **Fund selection applied to Proteccion's voluntary pension fund**

A principal component analysis was undertaken and four components are able to explain 80% of the joint variance of returns. Seven funds are those that an investor can choose with the highest (in absolute terms) correlations with risk factors.

#### **Performance evaluation applied to Proteccion's voluntary pension fund**

According to the descriptive statistics for the funds selected the most profitable funds were ACCP<sup>9</sup>, ACCME and RFPAL; while in general, funds that invested in currencies such as RFDLP, ACCE and ACCRFD had negative returns. The riskiest funds (standard deviation) were ACCP, ACCE and ACCME while the least risky fund was RFPAL and PRODIV.

A stochastic dominance analysis showed that RFPAL dominated the rest funds (except for ACCP and ACCME) while PRODIV dominated RFDLP, ACCE y

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8. Due to space constraints we omit the analysis of Skandia's voluntary pension funds.

9. The interested reader can find in the paper the meaning of these abbreviations (tickers).

ACCRFD. Interestingly, in unreported results, the risk free rate dominated most of the funds except for ACCP.

Sharpe's ratio varied from -0.5 to +0.5 with the exception of RFPAL. By and large, there is a downwards trend in the period. On average, Sharpe's ratios were negative except for ACCE and ACCME. The zero partial moment shows an increasing trend for most of the funds until reaching an 80% level at the end of the sample. Finally, the maximum drawdown showed a similar behavior to that of the first partial moment.

### **Portfolio allocation applied to Protección's pension funds**

With the seven selected funds and analyzing the series of rolling correlations of ex-ante and ex-post returns on efficient portfolios, we observed correlations with values close to +/-1 for different periods and windows without any clear cut pattern or improvement when using either of the two methods.

We report that average correlations are all negative. For the two optimization methods there is a propensity of declining correlations (they turned more negative) as the window size increases. Correlations reported here do not provide evidence of persistence pattern nor of improvement in performance for either method in the sense of securing high future returns based on past returns.

The results do not provide evidence of statistically nor economically significant differences in performance when using either optimization methodology applied to Protección pension funds.

### **Concluding remarks**

This document analyzed performance of Colombia's mandatory pension funds for the 2004 – 2008 period, a time span in which these funds, affected by a world crisis, experienced a decline in performance.

In regards to performance of voluntary pension funds we found a decline in funds' performance and an increase in risk (whatever the metric) in the last years. In addition, we found that mandatory pension funds outperformed voluntary pension funds. Likewise, voluntary pension funds had a sub-optimal behavior even when compared to the risk free rate, a finding derived from a stochastic dominance analysis.

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Through a principal components analysis we were able to objectively choose a number of funds that properly represent the joint movement of all voluntary funds' returns.

None of the two voluntary pension funds analyzed showed patterns of persistence in the short run, and on the contrary, we documented reversion patterns. Furthermore no evidence was found in relation to improvements in performance when using a particular portfolio optimization methodology (Markowitz (1952) and Reveiz et al. (2008)).

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## FINANCE, PSYCHOLOGY, AND VENEZUELA'S BONDS MARKET: DO THEY MIX?

CÁNDIDO PÉREZ, IESA, VENEZUELA  
candido.perez@iesa.edu.ve

ANA MALDONADO, MASTER OF FINANCE AT IESA, VENEZUELA  
ana.maldonado@iesa.edu.ve

JUAN ASUAJE, MASTER OF FINANCE AT IESA, VENEZUELA  
juan.asuaje@iesa.edu.ve

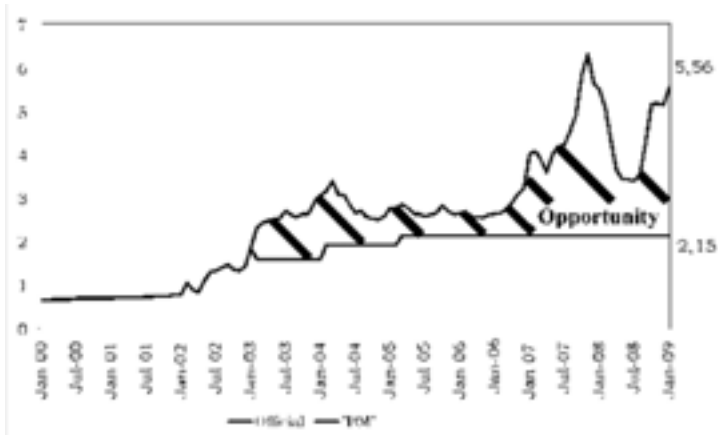
THIS WORK WAS PRESENTED AT THE LATIN AMERICAN RESEARCH CONSORTIUM  
AND DEAN'S WORKSHOP (LARC)  
FINANCE RESEARCH WORKSHOP PRESENTATION  
NEW ORLEANS, LA, UNITED STATES  
MARCH, 2009

### **Abstract**

Due to increasing pressure from inflation Venezuela's government sold bonds nominated in foreign currencies in order to manage pressures over the official exchange rate. This exploratory study analyzes psychological explanations to small investor's horizon measured as the time of possession of above-mentioned bonds. Based on a convenience sample of Master of Finance students, employees from finance departments at banks, investment funds, and professional stock-market traders, our findings relate endowment-effect,

and status-quo bias as explanations (curiously, over-reaction was not a relevant factor) to otherwise no rational behavior, with small investors bearing longer more country-risk without adequate compensation.

## Environment, literature synopsis and the proposed model



**Figure 1.** Venezuela's exchange rate. Official vs. "Black market"

From year 2003 Venezuela's government, through "Ministerio del Poder Popular para las Finanzas", restarted the process of issuing debt (see Table 1 for details) to finance its programs in the midst of a severe exchange control. Bonds were issued in multiple portfolios, most of it fully-negotiable in foreign markets (more details on <http://www.mf.gov.ve>). Due to severe currency exchange limitations and a huge spread between the official (2,15 Bs.F / \$) and "black market" exchange rates, economic agents look for those bonds as shows Figure 1.

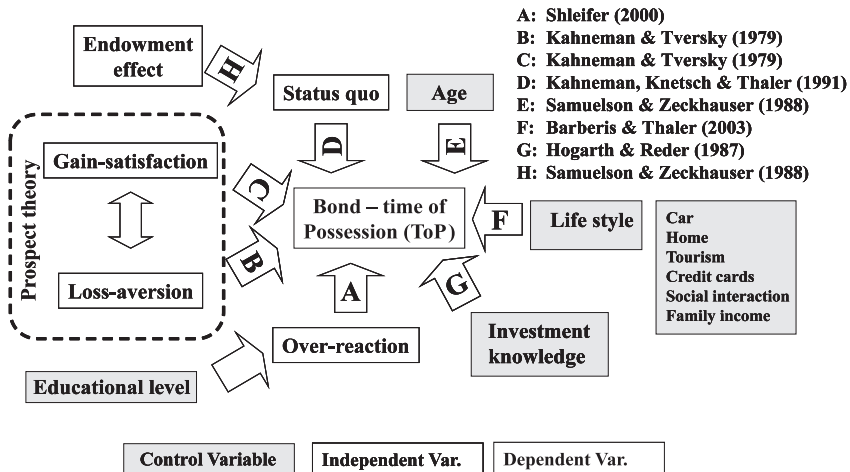
**Table 1.** Bonds nominated in US \$

Bond	Date	Demad	Offer
Sur I	11/16/06	3 bill	1 bill
Sur II	3/8/07	12 bill	1.5 bill
PDVSA	4/12/07	12 bill	7.5 bill
Sur III	10/4/07	6 bill	1.2 bill
Venezolano I	11/15/07	5 bill	1.65 bill
Venezolano II	11/27/07	5.7 bill	0.825 bill

On the one hand, traditional finance literature suggests that local investors bought government-offered bonds for pure economic value (cheap US \$). On the other hand, human psychology impact decision-making, so our focus is to test if small investors kept the bonds for longer than reasonable due to psychological biases.

The psychology of decision-making under uncertainty

From common grounds on decision-making under uncertainty, our model (shown in Figure 2) relates the willingness of individuals to keep their position in government-issues bonds denominated in foreign currencies--measured as the time elapsed between the moment of assignment from government offices and the sold of the bonds in the secondary market--with the endowment-effect, over-reaction, and status-quo bias, controlling for a couple variables known to correlate with portfolio decision-making: loss-aversion, and gains-satisfaction. These five variables were measured by a questionnaire with simple vignettes asking individuals to show their degree of agreement or disagreement in a Likert-type scale of seven steps. In addition, we consider several demographic attributes: age, educational level, genre, knowledge as investor, and socio-economic way of life.



**Figure 2.** Proposed model

## Main hypothesis and experimental design

From the literature review our main hypothesis follows:

*Status-quo and over-reaction biases are directly related to the possession time but as the first extends it, the seconds reduces the time*

In terms of design, we have a tested questionnaire with 14 vignettes to measure explanatory variables, six questions for the dependent variable, and seven for demographic attributes.

## Results

After sampling by convenience 102 pre-screened individuals we found 90 usable questionnaires, the other 12 were not properly fulfilled. Those 90 include 28.89% of women and an average age of 33.19 years, 21.11% banking employees/stock-brokers and 54.44% with graduate degrees.

Our investors report a growing pace of participation in the government issued bonds market described in Table 1: from 54 to 85, 88, 91, 99 and 99% in Sur I, Sur II, PDVSA, Sur III, Venezolano I, and Venezolano II respectively. Their more common strategy was “buy cheap dollars”(55%), and obtain fast-profit in local currency (17%).

The time of possession was in the range between a week and a month which is contrary to the rational economic theory: sell it immediately to obtain the US dollars without bearing more risks.

Among the control variables, the educational level is high; the socio-economic way of life is relatively high (all individuals have invested in bonds), and the financial expertise was medium.

As a first contrast, the ratio of loss-aversion and gains-satisfaction measures is 1.45 which is consistent with prospect theory (Kahneman and Tversky, 1979) where the usual value is 2.25.

In order to test our hypothesis, we ran an OLS regression with usual checks for heteroscedasticity. Table 2 shows the results omitting values for control variables for simplicity.

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**Table 2.** Time of possession on endowment effect, over-reaction, status quo and control variables

	<b>Coefficient</b>	<b>t-value</b>	<b>p-value</b>
Constant	2.2167	5.7601	0.0000
Endowment effect	0.3167	2.3830	0.0191
Over-reaction	0.1485	1.8826	0.0267
Status quo	0.2752	2.2896	0.0241

Formal hypothesis testing provides statistical evidence to reject the null hypothesis of no relationship between the endowment-effect, status quo, and the time of possession, at conventional significance levels, with positive values as expected.

The over-reaction was significant slightly short from the usual 95% level but reasonable as this study is exploratory. Its sign was positive instead of the expected negativity.

### **Analysis and final remarks**

Our model showed that there are some psychological explanations for financial decision-making even if investors have earned college degrees and have some sort of knowledge of financial markets. They showed more participation as time develops suggesting an increase in information-spreading across the country. These explanations are at odds with traditional economic theory because investors are bearing more risk than they should when keeping the bonds. They suffer from the country-risk by living in the country and add the default risk of their government.

As a first result, we showed the general proposition of prospect theory (Kahneman and Tversky, 1979): the loss-aversion is steeper than the gain-satisfaction.

In particular, we found strong statistical support for the influence of the endowment-effect and the status-quo bias on investors' slow-response selling their bonds across the secondary market.

Our third measure (over-reaction) of the same effect did not confirm the above-mentioned behavior. We expected a negative coefficient instead the

positive obtained. This result suggests us to proceed cautiously before making inferences about bigger populations.

### Limitations

Our study has two areas to improve. On the one hand, some of the control variables resulted not useful in terms of statistical significance, specially genre, educational level, and knowledge as investor. On the other hand, the sample by convenience causes a loss in the heterogeneity we suspect in general population, particularly when defining the questionnaire.

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SELECTED ABSTRACTS

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EXPLORING THE RELATIONSHIP BETWEEN PERSONALITY  
TRAITS NEED FOR COGNITION, POSITIVE AND NEGATIVE  
AFFECTIVITY, AND THE INFORMATION CHOICE AND TIME  
ESTIMATION DESCRIBED IN THE PLANNING  
FALLACY THEORY

ERNESTO BLANCO, TULANE UNIVERSITY, NEW ORLEANS, UNITED STATES  
ernesto.blanco@iesea.edu.ve

THIS WORK WAS PRESENTED AT THE LATIN AMERICAN RESEARCH CONSORTIUM  
AND DEAN'S WORKSHOP (LARC)  
MANAGEMENT WORKSHOP PRESENTATION  
NEW ORLEANS, LA, UNITED STATES  
MARCH, 2009

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## Abstract

In an experiment intended to explore the relationship between individual differences and information choices, three groups of MBA's students were given a hypothetical case in which they had to take decisions about what type of information they should select to perform the task time estimation. The information presented to participants was previously set as singular or distributional, according to Kahneman and Tversky's (1979) claim that people rely far more on singular information than on distributional information

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when estimating the completion time of a task. Individual differences in need for cognition (NC), positive affectivity (PA), and negative affectivity (NA), were related with participants' information choices and time estimates. No relationship was found between NC and the information choices and time estimates performed in the experiment. Regarding PA and NA, participants higher in NA gave less importance to distributional information issues than participants lower in this personality trait. However, no relationship was found between NA and time estimates. Finally, no relationship was found between PA and the information choices and time estimates performed in the experiment.

Singular information refers to the evidence about the particular case under consideration, which includes all information or details closely related with the development of the task, such as the logic sequence of actions to carry it out. Distributional information refers to the knowledge about the distribution of outcomes in similar situations, which includes all information or details not closely related with the development of the task, but that might affect its execution (Kahneman and Tversky's, 1979). People who focus too narrowly on the specific requirements of the current task (singular information), may overlook other aspects related with it (Buehler, Griffin, and Ross, 2002). They ignore or under-value distributional information that would help to evaluate the relevant distribution of comparable projects. The accuracy of the time estimate is affected by the type of information selected to perform it. Excessive focus on singular information and disregarding of distributional information will lead the planner to develop overoptimistic estimates.

Need for cognition has been described as the tendency of certain individuals to acquaint themselves with a wide range of matters in order to make sense of the world around them. These individuals enjoy thinking endeavors, and so will actively search for more information when performing thinking tasks (Cohen, Stotland, and Wolf, 1955; Cacioppo and Petty, 1982). Based in this description, it was hypothesized that people higher in NC would give more importance to distributional information and would estimate longer completion times for the hypothetical task, than people lower in NC. However, the outcomes of the study did not support the hypotheses, suggesting that

even when the literature explains that people higher in NC tend to search and analyze more information, it could be argued that this does not mean that they are interested in every subject they find. They may have different interests for which they will engage in cognitive efforts. The experiment presented the participants a case where they had to perform the role of planning manager for a new plant to produce car components. The choices and time estimates they had to do were both related with the field of industrial construction, which could not elicit the interest of much of the experiment's participants, even ranking high in NC.

Negative affectivity has been described as a general dimension of subjective distress and unpleasurable engagement that subsumes a variety of aversive mood states, including anger, contempt, fear, and nervousness (Watson, Clark and Tellegen, 1988). It has been found that people high in NA are better at recognizing, recalling, and relearning stimuli associated with failure (Watson, Clark and Tellegen, 1988), accept negative information about themselves, and tend to seek for more information in order to reduce the uncertainty and feelings of lack of control that accompany their affective state (Marsh & Weary, 1989), and that there is an inverse relationship between NA and optimism (Chang et al., 1997). Based in these findings, it was hypothesized that people higher in NA would give more importance to distributional information and estimate longer completion times than people lower in NA. The outcomes of the experiment show that, contrary to the expectations, people higher in NA gave more importance to singular rather than distributional information. No relationship was found with time estimate. These outcomes suggest that all high NA individuals are not prone to be more thoughtful and willing to acquire more information to avoid future failures.

Positive affectivity reflects the extent to which a person feels enthusiastic, active and alert. High PA is a state of high energy, full concentration, and pleasurable engagement (Watson, Clark and Tellegen, 1988). It has been found that higher levels of PA may lead individuals to stay in the wrong course of action due to their optimistic feeling (Chang, Maydeu-Olivares, and D'Zurilla, 1997), and avoid negative material to maintain positive feelings. People with positive affect may avoid difficult or unpleasant tasks or materials, or may

choose to work on more pleasant items (Isen, 1993). Based in these findings, it was hypothesized that people higher in PA would give less importance to distributional rather than singular information and would estimate shorter completion times for the considered task. None of these hypotheses were supported. It is not clear why this happened, but it could be argued that PA individuals did not find the task pleasant, causing its rejection and, therefore, performed incorrectly.

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## FORECASTING THE COLOMBIAN NATIONAL GOVERNMENT'S TOTAL EXPENDITURES AND TOTAL INCOME USING TEMPORAL AGGREGATION

JULIO CESAR ALONSO, UNIVERSIDAD ICESI, COLOMBIA  
jcalonso@icesi.edu.co

MAURICIO ALEJANDRO ARCOS, UNIVERSIDAD ICESI, COLOMBIA  
marcos@icesi.edu.co

THIS WORK WAS PRESENTED AT THE LATIN AMERICAN RESEARCH CONSORTIUM  
AND DEAN'S WORKSHOP (LARC)  
FINANCE RESEARCH WORKSHOP PRESENTATION  
NEW ORLEANS, LA, UNITED STATES  
MARCH, 2009

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### **Abstract**

We estimate annual forecasts to the Colombian Government's total revenues and total expenditures, using temporal aggregation methodology. Particularly, we use monthly data (high frequency data) to estimate a SARIMA model for each account, then we apply the Silvestrini and Veredas(2004) temporal aggregation technique to obtain an annual equivalent Data Generating Process (DGP). Two different forecast methods are compared: i) adding twelve-steps-ahead forecasts from the high frequency DGP and ii) estimating

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a one-step-ahead forecast from the low frequency (annual) DGP. We found that the aggregation technique improves the accuracy of the deficit forecasts. Furthermore, this methodology allows updating the annual forecasts as soon as new monthly data available. Finally, we discuss the applications of this methodology in the private and public sector's budgeting process.

**Keywords**

Colombian fiscal deficit, temporal aggregation, SARIMA models, forecasts.

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## CORPORATE FINANCIAL DISTRESS AND BANKRUPTCY LAWS IN COLOMBIA

ERIC FERNANDO RODRIGUEZ, UNIVERSIDAD DE LOS ANDES, COLOMBIA  
efr@adm.uniandes.edu.co

THIS WORK WAS PRESENTED AT THE LATIN AMERICAN RESEARCH CONSORTIUM  
AND DEAN'S WORKSHOP (LARC)  
FINANCE RESEARCH WORKSHOP PRESENTATION  
NEW ORLEANS, LA, UNITED STATES  
MARCH, 2009

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### **Abstract**

From the year 1999 to the year 2004, 1,275 companies were accepted to Ley 550, the bankruptcy framework law in Colombia, and just 43 companies ended in a successful recovery. We raise here our main research question: The problem is with the law framework or is the moment when the company begins the restructuring process?

Following Altman (1977) we studied a sample of companies that report to the Superintendencia de Sociedades (SSOC), Superintendencia de Servicios Públicos domiciliarios (SSPD) and Superintendencia nacional de salud (SNS) to determine the correct moment when a company should reach the restructuring process and to identify principal keys indicators that may predict bankruptcy risks. We found a bankruptcy cycle for the company where the point

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of correct intervention is two years before the point of no return (Liquidation). And we found a positive relation between return on assets (ROA) and the probability of bankruptcy, contrary to the relation found by Altman (2000) and Shumway (2001), this positive relation occurs when the economy recovers and companies overreact in terms of fix asset investments using debt as the main financial source.

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ANNEXES

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PROGRAM  
THE LATIN AMERICAN RESEARCH CONSORTIUM  
AND DEANS' WORKSHOP

**Social responsibility and entrepreneurship**

**March 25-27, 2009**

**B. FREEMAN SCHOOL OF BUSINESS**

**TULANE UNIVERSITY**

**# 7 McALISTER DRIVE**

**NEW ORLEANS, LA 70118**

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**March 25, 2009**

**(8:00 a.m. – 5:00 p.m.)**

**Room 3101, Goldring Woldenberg Hall II**

**Burkenroad reports for latin america (brla) workshop<sup>10</sup>**

8:30 – 8:45 a.m.

Introduction

John Trapani, Tulane

Eduardo Pablo, IESA

Pam Shaw, Tulane

8:45 – 10:45 a.m.

“Recent Public Company Reports for Publication and Program Updates”

Henrique Ghersi, IESA

Julian Benavides, Icesi

Helmuth Chavez, UFM

Eduardo Court, Centrum

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10. The Burkenroad Reports for Latin America is an educational program initiated by Tulane in 1997 in a partnership with UniAndes, ITESM Monterrey, and IESA. It is a program that prepares students to produce professional quality investment research reports on SME's located in the region. These reports are supervised by faculty, involve local company participation, and are distributed internationally by Tulane. Burkenroad reports are now prepared on 20 companies by nine top business schools in Latin America, which we refer to as the BRLA Consortium. The schools are: ITESM-Monterrey, ITESM-Guadalajara, Universidad de los Andes, IESA, Universidad Francisco Marroquin, Icesi, Centrum (Católica de Peru), Universidad de Belgrano, and ESPAE-ESPOL.

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- 10:45 – 11:30 a.m. Break
- 11:30 – 12:30 a.m. “Recent Public Company Reports for Publication”  
Alexandra Portalanza, ESPOL  
Marcelo Dabos and Carlos Steiger, Universidad de Belgrano  
Jose Maria del Castillo, UniAndes
- 12:30 – 2:00 p.m. LUNCH
- 2:00 – 2:30 p.m. “Recent Public Company Reports for Publication and Program Updates”  
Bernardo Bernardi, UniNorte, Barranquilla
- 2:30 – 3:00 p.m. “Forecasting Revenues and Capital Expenditures with Limited Information”  
Pam Shaw, Tulane
- 3:00 – 3:30 p.m. BREAK
- 3:30 – 4:15 p.m. “Brief Database Explanation: Economatica: Statistical Financial Forecasting Methods & Monte Carlo Simulation”  
Eduardo Pablo, Tulane
- 4:15 – 5:00 p.m. “Latin American Burkenroad Reports Update and Website”  
Eduardo Pablo, IESA
- 6:30 p.m. Dinner for Burkenroad Reports for Latin America Participants

**March 26, 2009****(8:00 a.m. – 4:45 p.m.)****Room 3101, Goldring Woldenberg Hall II****Dean’s workshop and Iarc seminars<sup>11</sup>**

- 8:30 – 8:45 a.m. Welcome and Introductions  
Angelo DeNisi, Dean

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11. The Latin American Research Consortium was founded by Tulane University in 1995 with the purpose of promoting scholarly research on Latin American markets and business institutions. Its goal is to bring together scholars from around the world who are experts on Latin American business issues to share their research and knowledge related to these issues. Schools and other institutions represented at the consortium meet-

- John Trapani, Program Director  
James McFarland, Moderator
- 8:45 – 10:15 a.m. Presentations
- “Social Responsibility in Business School Curricula at UniAndes”  
Maria Lorena Gutierrez, UniAndes
- “Strategy in Emerging Countries: Markets, Sustainability and Social Entrepreneurship.”  
Carlos Alcerecca, ITAM
- “Experiential Learning and Social Responsibility”  
Daniel Mosca, ITESM Mexico City
- “Curricula Reform at ICADE & the Bologna Reform Process of European University Education”  
Robert Robinson and Alfredo Arahuetes, ICADE (Spain)
- 10:15 – 10:45 a.m. Break
- 10:45 – 12:30 p.m. Presentations
- “Teaching Social Responsibility at UDEM”  
Tony Dieck, UDEM
- “Strategic Choices: Operating in a Turbulent Business Context”  
Francisco Sananez, IESA
- “Business School Strategy and the Role of Social Responsibility”  
Felipe Morande, U. Chile
- “Beyond Grey Pinstripes: The EGADE Model”  
Eduardo Guzman, ITESM Monterrey

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ings in the past have included ITESM-Monterrey, EGADE, INCAE, Universidad de los Andes, IESA, ITESM-Guadalajara, University of Chile, Universidad de Belgrano, Católica de Bolivia, Católica de Peru, ITAM, Instituto de Empresa (Spain), Getulio Vargas, Universidad Francisco Marroquin, ESPAE-ESPOL, Central Bank of Brazil, and UCLA, Tulane University, Texas Christian University, and the University of Illinois in the United States. In 2007 the Deans' Workshop was initiated as part of the Consortium meeting to provide the deans of the top business schools in Latin America a forum to share their programs and initiatives in management education in the region. The 2009 meeting, being held here at Tulane University in New Orleans, Louisiana, is the ninth meeting of LARC.

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- 12:30 – 2:00 p.m. Lunch
- 2:00 – 3:00 p.m. Panel One
- “Social Innovation in Business: The Case of Santa Teresa”
- Henrique Vollmer, Director, Santa Teresa (Panel Keynote)
- Panelists
- Beatrice Avolio, Centrum
- Luis Sanchez, U. del Norte
- Helmuth Chavez, UFM
- Alexandra Portalanza, ESPOL
- Carlos Stieger, Belgrano
- 3:00 – 3:15 p.m. Break
- 3:15 – 4:15 p.m. Panel Two
- “Social Innovation in Business: The Use of Private-Public Partnerships”
- Pres Kabacoff, CEO HRI Properties (Panel Keynote)
- Panelists
- Henry Gomez, IESA & UniAndes
- Virginia Lasio, ESPOL
- Irineu Gianesi, IBMEC
- Eduardo Guzman, ITESM Monterrey
- Diego Cardona, U. del Norte
- 4:15 – 4:30 p.m. Break
- 4:30 – 5:30 p.m. Panel Three
- “Implications for Educational, Research, and Outreach Programs”
- Panelists
- Marcelo Paladino, IAE (Moderator)
- Hector Ochoa, Icesi
- Carlos Basurto, UDEM
- Claudio Ruibal, U. Montevideo
-

Julia Sagebien & Paul LaTortue UPRRP

7:30 p.m.

Dinner Plimsoll Club, New Orleans Trade Center

**Management research seminars**

**March 26, 2009**

**(2:00 p.m. – 4:45 p.m.)**

**Room 3101, Goldring Woldenberg Hall II**

2:00-3:30 p.m.

Trust and Safety

Adrienne Colella Tulane (Chair)

1. “Development of trust in organizations”

José Roberto Concha Velásquez (Icesi)

2. “Social costs of pursuing high aspirations in competitive negotiation”

Lei Lai (Tulane), Hannah Riley Bowles (Harvard), & Linda Babcock (Carnegie Mellon)

3. “The dread factor: How hazards and safety training influence training outcomes”

Shirley Sonesh (Tulane)

3:30 – 3:45 p.m.

Break

3:45 – 4:45 p.m.

Advances in Consumer Behavior

Mita Suján, Tulane (Chair)

1. “Responsible designs: Avoiding confusion in categories that have \*me too\* products”

Julio C. Alonso & Ana Arboleda (Icesi)

2. “Making do with less: Increasing happiness-to-consumption ratio”

Silvio Borrero (Icesi)

7:30 p.m.

Dinner Plimsoll Club, New Orleans Trade Center

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**Finance research workshops****March 26, 2009****(2:00 p.m. – 4:45 p.m.)****Room 151, Goldring Woldenberg I**

- 2:00 – 3:30 p.m.      Corporate ownership and governance  
Rob Hansen, Tulane (Chair)
1. “Ownership Structure and Performance during Business Cycles: Evidence from Chile”  
Marcelo Gonzalez, U. Chile and Arturo Rodriguez, U. Chile
  2. “Corporate Governance in Mexico on the light of the White Paper of the OCDE”  
Luis de Garate, EGADE
  3. “Dissertation Topics in Finance”  
Helmuth Chavez, UFM and Polux Diaz Ruiz, ITAM
- 3:30 – 3:45 p.m.      Break
- 3:45 – 4:45 p.m.      Latin American portfolio allocation and ADRs  
Rob Hansen, Tulane (Chair)
1. “Optimal Portfolio Allocation for Latin American Stock Indices”  
Mauricio Arcos, Icesi, Julian Benavides, Icesi, and Luis Berggrun, Icesi
  2. “Latin American ADRs and Signaling: Does the US regulation matter?”  
Luis de Garate, EGADE
- 7:00 p.m.              Dinner Plimsoll Club, WTC New Orleans
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**March 27, 2009**

**(9:00 a.m. – 11:00 a.m.)**

**Room 3101, Goldring Woldenberg Hall II**

**Dean's meeting on faculty development doctoral programs at Tulane<sup>12</sup>**

9:00 – 10:00 a.m. “Latin American Faculty Development PhD Program”<sup>13</sup>

John Trapani, Adrienne Colella, Mike Burke, Paul Spindt, Rob Hansen, and Janice Hughes, Tulane University

10:00 – 11:00 a.m. AACSB Bridge to Business Post-Doctoral Program  
John Trapani, Victor Cook and Janice Hughes, Tulane University

**Management workshops**

**March 27, 2009**

**(9:30 a.m. – 4:30 p.m.)**

**Room 3110, Goldring Woldenberg II**

9:30 – 11:00 a.m. Individual Differences in OB and CB  
Mike Burke, Tulane (Chair)

12. Tulane University will offer its sixth Faculty Development PhD program beginning in September 2009. PhD candidates may choose an area of concentration in finance or management. The degree awarded is the Doctor of Philosophy degree in Business Administration from Tulane University.

The Tulane faculty development PhD programs began in 1994 and have grown to include over 100 faculty participants currently enrolled or graduated. Over 65 participants have received their PhD degree from Tulane. The PhD program is a special faculty development arrangement between Tulane University and selected top business schools in Latin America to provide doctoral degree programs for working faculty. Past partners have included: ITESM, Monterrey, Mexico; ITESM, Guadalajara, Mexico; IESA, Caracas, Venezuela; Universidad de los Andes, Bogotá, Colombia; ESPO, Guayaquil, Ecuador; ITAM, Mexico City, Mexico; Universidad Francisco Marroquín, Guatemala City, Guatemala, and; Icesi, Cali Colombia. Graduates of the Tulane faculty development PhD program now hold key administrative positions at many prestigious business schools in Latin America and others have distinguished themselves as outstanding scholars in their fields. The Latin American Research Consortium was founded to support the faculty development PhD program's research goals. (<http://www.laphd.com>)

13. Tulane University will enroll the second cohort of the post-doctoral program starting in June 2009 to allow non-business PhD holders to transition into related fields of research in business. This “bridge to business” program is endorsed by AACSB International. Graduates of Tulane's post-doctoral program will receive the same initial qualification status by the AACSB as do graduates of a business doctoral program. This program is available to faculty in Latin America through our partner institutions ITAM in Mexico City and Universidad de los Andes in Bogota, Colombia. The graduates of Tulane's program will be considered academically qualified by AACSB-accredited business schools for a period of five years from program completion. The first cohort of this program hold doctorates in Anthropology, Communications, Economics, Education, Engineering, Mathematics, Philosophy, Psychology, Sociology and Statistics. Their PhD degrees are from Alabama, Berkeley, Barcelona, Bradford, Emory, Essex, Florida, Jesuit, Iowa State, Louvain, MIT, Pennsylvania, Texas, Toronto, Tulane and Waterloo. (<http://www.aacsbpostdoc.tulane.edu>)

1. “Globalization: From macro to micro processes”  
Delfino Vargas (El Colegio de Mexico)  
Maria Merino (ITAM)
  2. “Exploring the relationship between personality traits need for cognition, positive affectivity and negative affectivity, and information choices, time estimations, and degree of confidence”  
Ernesto Blanco (IESA)
  3. “The moderating effect of global self-esteem on the relationship between two dimensions of the Big Five personality factors (extroversion and negative affectivity) and subjective wellbeing (SWB): The Colombian case”  
Elvira Salgado, Eduardo Wills, Elvia Vargas, & John Castro (Universidad de los Andes)
- 11:00 – 11:15 a.m. Break
- 11:15 – 12:30 p.m. Individual Differences in OB and CB  
Mike Burke, Tulane (Chair)
4. “The relationship between subjective well-being and organizational citizenship behavior in a Colombian sample”  
Guillermo Otálora & Ana del P. Cárdenas (Universidad de los Andes)
  5. “Understanding the effect of practical intelligence on sales performance: When does motivation make up for and when does it negate ability?”  
Jaime Garcia, Manish Kacker (Tulane), Raul Ruiz, Harish Sujjan (Tulane), & Mita Sujjan (Tulane)
- 12:30 – 2:00 p.m. Lunch
- 2:00 – 3:00 p.m. Advances in Strategy  
Harish Sujjan, Tulane (Chair)
1. The future of traditional retailers in Latin America  
Silvia Gonzalez (ITESM) & Maria Merino (ITAM)
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2. Commercial Intermediaries as supply chain transmitters and decouplers  
Guillermo Abel Musik (ITAM) & Maria Merino (ITAM)
- 3:00 – 3:15 p.m. Break
- 3:15 – 4:15 p.m. Advances in Strategy  
Harish Suján, Tulane (Chair)
3. “Attracting investment to underdeveloped sectors: The case of aquaculture in Peru”  
Christian Mejía-Acosta & Adrian Fajardo-Christen (CENTRUM Católica)
4. “Innovation across manufacturing value chains: An examination of the case of Colombia”  
Rafael Vesga (Universidad de Los Andes School of Management)
- 4:15 – 4:30 p.m. Wrap Up
- 7:00 p.m. Dinner Rambla (International House Hotel) Downtown, New Orleans

### **Finance research workshops**

**March 27, 2009**

**(9:30 a.m. – 4:30 p.m.)**

**Room 3111, Goldring Woldenberg II**

- 9:30 – 11:00 a.m. Forecasting government expenditures, market returns, and bank failure  
Paul Spindt, Tulane (Chair)
1. “Forecasting the Colombian National Government’s Total Expenditures and Total Income using Temporal Aggregation”  
Julio Cesar Alonso, Icesi & Mauricio Alejandro Arcos, Icesi
2. “Financial Market Patterns: A Forecast Evaluation with High Frequency  
Data for the Colombian Exchange Market Index,” Julio Cesar Alonso, Icesi

“An Empirical Model of Bank Failure Probability”

Marcelo Pedro Dabos, U. Belgrano

11:00 – 11:15 a.m. Break

11:15 – 12:30 p.m. Topics in Financial Market Research

Paul Spindt, Tulane (Chair)

4. “Corporate Financial Distress and Bankruptcy Laws in Colombia”

Eric Fernando Rodríguez (UniAndes)

5. “What is the value of corporate social responsibility? An answer from the Brazilian sustainability index”

Jose Luis Rossi Junior, IBMEC

6. “Topics on Mexican Financial Markets”

Jorge Rocha, EGADE

12:30 – 2:00 p.m. Lunch

2:00 – 3:00 p.m. Fund behavior and investor psychology

David Lesmond, Tulane (Chair)

1. “Performance Evaluation, Fund Selection & Portfolio Allocation Applied to Colombia’s Pension Funds”

Luis Berggrun, Icesi and Fernando Jaramillo, Icesi

2. “Finance, Psychology, and Venezuela’s Bond Market: Do They Mix?”

Cándido Perez, IESA, Ana Cristina Maldonado Larrazábal, IESA and Juan Carlos Asuaje

Reggeti, IESA

3:00 – 3:15 p.m. Break

3:15 – 4:15 p.m. 3. “Topics in Emerging Market Finance”

David Lesmond, Tulane

4. “Privatization and Liquidity: The Case of The Chinese Market”

Ting Hu, Tulane

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5. "Corporate financial policies and the exchange rate regime: evidence from Brazil"

Jose Luis Rossi Junior, IBMEC

4:15 – 4:30 p.m.

Wrap Up

7:00 p.m.

Dinner TBA

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