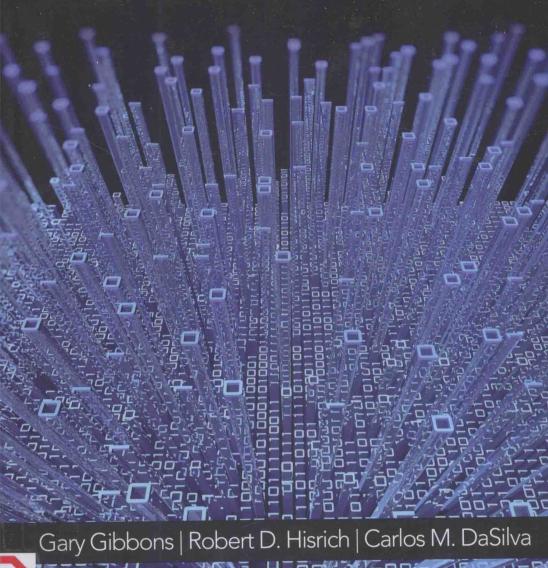
## Entrepreneurial Finance

A Global Perspective



# Entrepreneurial Finance

A Global Perspective

**Gary Gibbons** 

Thunderbird School of Global Munagement

Robert D. Hisrich

Thunderbird School of Global Management

Carlos M. DaSilva

School of Business Administration, Fribourg, Switzerland



Los Angeles | London | New Delhi Singapore | Washington DC



Los Angeles | London | New Delhi Singapore | Washington DC

#### FOR INFORMATION:

SAGE Publications, Inc.
2455 Teller Road
Thousand Oaks, California 91320
E-mail: order@sagepub.com

SAGE Publications Ltd.
1 Oliver's Yard
55 City Road
London EC1Y 1SP
United Kingdom

SAGE Publications India Pvt. Ltd.
B 1/I 1 Mohan Cooperative Industrial Area
Mathura Road, New Delhi 110 044
India

SAGE Publications Asia-Pacific Pte. Ltd. 3 Church Street #10-04 Samsung Hub Singapore 049483

Acquisitions Editor: Maggie Stanley
Associate Editor: Abbie Rickard
Editorial Assistant: Nicole Mangona
Production Editor: Melanie Birdsall
Copy Editor: Gillian Dickens
Typesetter: C&M Digitals (P) Ltd.
Proofreader: Caryne Brown
Indexer: Amy Murphy
Cover Designer: Edgar Abarca
Marketing Manager: Liz Thornton

Copyright © 2015 by SAGE Publications, Inc.

All rights reserved. No part of this book may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the publisher.

Printed in the United States of America

Library of Congress Cataloging-in-Publication Data

Gibbons, Gary E.

Entrepreneurial finance: a global perspective / Gary Gibbons, Robert D. Hisrich, Carlos M. DaSilva.

pages cm Includes bibliographical references and index.

ISBN 978-1-4522-7417-1 (pbk.)

1. New business enterprises—Finance. 2. International business enterprises—Finance. 3. Venture capital. 4. Entrepreneurship. I. Hisrich, Robert D. II. DaSilva, Carlos M. III. Title.

HG4027.6.G53 2015 658.15'99—dc23 2014024676

This book is printed on acid-free paper.



14 15 16 17 18 10 9 8 7 6 5 4 3 2 1

## Entrepreneurial Finance

I dedicate this book to three exceptional friends and scholars:

M. Lynne Markus

David Drew

James Logan

—Gary Gibbons

I dedicate this book to my great supporters:

My wife, Tina

My daughters, Kary, Katy, and Kelly

My son-in-law, Rich

My grandchildren, Rachel, Andrew, and Sara

-Robert D. Hisrich

I dedicate this book to entrepreneurs worldwide who have dedicated their lives to build meaningful companies; and

To all future entrepreneurs who do not yet realize the potential and impact their dreams can have on the world; and

Finally, I dedicate this book to all business mentors who voluntarily give their time to help the younger generation achieve success.

-Carlos M. DaSilva

#### **Preface**

his book was conceived from the entrepreneurial perspective. Finance is a subject often neglected by the entrepreneur. According to the U.S. Small Business Administration, finance or, to be accurate, ignorance of finance is the root cause of 74% of small business failures. We believe that knowledge of finance is as essential to the manager's toolkit as the ability to sell, lead, and innovate. We also believe that finance should be made accessible to the entrepreneur from a pedagogical point of view. This book provides the entrepreneur the opportunity to develop the essential skills and conveys the necessary knowledge for him or her to be functional in the discipline, at least as far as his or her own business is concerned.

At the beginning of each chapter, there is a short case. In some chapters, the information in the case is used to provide expanded explanations and examples. In other chapters, the case is meant to illustrate a common circumstance encountered by entrepreneurs that illustrates the entrepreneur's need to understand the material that follows. All of the cases are real cases, although some have had company names or the names of the principals changed. Regardless, the subject matter described in the cases is real, and in our opinion, the problems faced in the cases are common to most entrepreneurs and occur regularly in entrepreneurial settings.

The field of finance is large and rapidly evolving. We have endeavored to relate information that is immediately usable and current, although not information that is subject to great controversy or rethinking. In some areas, such as understanding financial documents, ratio analysis, and cash flow management, the state of the art is settled. In other areas, such as cost of capital, capital budgeting, and valuation, much new thinking is permeating the field. In these cases, classical perspectives are provided on the techniques that are appropriate to the subject area. By making note of both the pros and cons of different methods or points of analysis, we have attempted to draw the reader's attention to some areas where new thinking is being actively put

forth and debated. Also, the book provides references to some of the best sources from which the reader may find further information on the subject at hand. Finally, in the references, we have included some of the most current and interesting sources of thought on the subjects we have addressed.

In our view, finance is one of the most interesting and useful of the social science paradigms, but it is only a tool. One cannot use it blindly and without the application of skill and judgment. The entrepreneur should use his or her knowledge of finance as he or she would any other tool. By itself, finance does not provide "the answer"; one cannot use it to calculate "the solution," but it can be used to frame the problem and suggest a proper course of action. Nothing, and certainly not the discipline of finance, can replace the entrepreneur's drive, ability to convince others of the worth of his or her vision, or ability to tolerate the uncertainty that the entrepreneur faces in the pursuit of his or her dream.

### **Acknowledgments**

We are grateful for the support, encouragement, and feedback we received during the production of this text. Several people deserve special mention for their unwavering and tireless support of this project. Carol Pacelli assisted in the preparation of many of the chapters. Francisco J. Ayala provided substantial research support and assistance in developing some of the chapters. Jonathan Beckley provided research support. Of course, any remaining errors, either of omission or commission, remain the sole responsibility of the authors.

Thanks to the following reviewers who participated throughout all stages of the book's development:

Frank W. Anderson, University of Texas at Dallas

Craig E. Armstrong, University of Alabama

David M. Ford, University of Alabama

Steven Frankforter, Winthrop University

Mary H. Harris, Cabrini College

Ronald Meyers, University of Cincinnati

Talitha Smith, Auburn University

David Springate, University of Texas at Dallas

Mengsteab Tesfayohannes, Susquehanna University

Xuan Tian, Indiana University

#### About the Authors

Gary Gibbons has extensive professional experience in portfolio management, securities valuation, financial modeling, and financial planning and evaluation of entrepreneurial firms. His corporate and investment clients include the Bank of Bermuda, the Agyros Foundation, Imperial Mortgage, Kaiser Steel Resources, the New Kaiser VEBA, the Kaiser Steel Benefit Trust, and many other institutions and small firms. Additionally, he has served as an expert witness or expert consultant in numerous legal proceedings; he has provided opinions that have been used in support of specific civil, tax, or regulatory positions. He has worked on both civil and criminal litigation and in court, arbitration, or mediation proceedings. Dr. Gibbons has served on the board of directors of both public and private companies. When serving on these various boards, he has generally acted in the capacity of the chief financial officer or the chair of the finance committee. Dr. Gibbons earned his PhD in business administration—with emphasis in strategy and finance at Claremont Graduate School, Peter F. Drucker Graduate School of Management. He is the Academic Director of the Thunderbird Private Equity Center at Thunderbird School of Global Management.

Robert D. Hisrich is the Garvin Professor of Global Entrepreneurship and Director of the Center for Global Entrepreneurship at Thunderbird School of Global Management. He is also president of H&B Associates, a marketing and management consulting firm he founded. Dr. Hisrich received his MBA and PhD degrees from the University of Cincinnati and honorary doctorate degrees from Chuvash State University (Russia) and the University of Miskolc (Hungary). He has authored and coauthored 34 books, including Marketing for Entrepreneurs and SMEs: A Global Perspective (with Maja Konečnik Ruzzier and Mitja Ruzzier, 2014); Managing Innovation and Entrepreneurship (with Claudine Kearney, 2014); Governpreneurship: Establishing a Thriving Entrepreneurial Spirit in Government (with Amr

Al-Dabbagh, 2013); Entrepreneurship: Starting, Developing, and Managing a New Enterprise (9th edition; with Michael P. Peters and Dean A. Shepherd, 2013); International Entrepreneurship: Starting, Developing, and Managing a Global Venture (2nd ed., 2013); Corporate Entrepreneurship: How to Create a Thriving Entrepreneurial Spirit Throughout Your Company (with Claudine Kearney, 2011); and Technology Entrepreneurship: Creating, Capturing, and Protecting Value (with Thomas N. Duening and Michael A. Lechter, 2010). He has written more than 325 articles on entrepreneurship, international business management, and venture capital. He has instituted academic and training programs in Hungary, Russia, and China.

Carlos M. DaSilva has widespread experience in entrepreneurship and the startup ecosystem. He is the Director of the Founder Institute, Portugal, the world's largest early stage startup accelerator, with over 1,000 graduate companies across six continents. Dr. DaSilva is responsible for the mentoring of dozens of technology entrepreneurs every year. He is frequently invited to lecture on topics related to entrepreneurship, as well as participate in the jury of various startup competitions. Dr. DaSilva held the positions of visiting scholar at the Thunderbird School of Global Management and at the University of Southern California in Los Angeles. He is a professor of entrepreneurship at the School of Business Administration in Fribourg, Switzerland, and lectures on topics related to entrepreneurial finance and business model innovation. Prior to obtaining his PhD in technology management at the University of Ljubljana, he worked for several years as a strategy manager at an Eastern European startup venture that was recently acquired by a large multinational group.

#### **Detailed Contents**

Preface	xiii
Acknowledgments	xv
About the Authors	xvii
Chapter 1. The Entrepreneurial Challenge: A Global Perspective	1
Case: CEON Solutions Pvt. Ltd.	1
Need for Entrepreneurial Finance	3
Types of Entrepreneurs	5
Becoming a Global Entrepreneur	6
Is It the Right Time?	6
Is It Risky to Become an Entrepreneur?	6
Traits of a Global Entrepreneur	8
The Need for Global Entrepreneurs	9
What Is Different About Entrepreneurial Finance?	10
Summary	11
Chapter 2. Business Planning for Entrepreneurs	13
Case: TerraPower, Inc.	13
Purpose of Writing a Business Plan	16
Benefits of a Business Plan	16
Elements of the Business Plan	17
Section 1: Introduction	19
Section 2: Body of the Business Plan	24
Section 3: Support (Backup) Material	28
Financial Information	29
Business Plan Development and Update	29
Summary	30

## **Brief Contents**

Preface	xii
Acknowledgments	xv
About the Authors	xvii
Chapter 1. The Entrepreneurial Challenge: A Global Perspective	1
Chapter 2. Business Planning for Entrepreneurs	13
Chapter 3. Understanding Financial Documents	31
Chapter 4. Financial Ratio Analysis	43
Chapter 5. Cash Flow Management	67
Chapter 6. Financial Projections for the Firm	81
Chapter 7. Cost of Capital and Capital Budgeting	113
Chapter 8. Valuation	139
Chapter 9. Raising Capital	171
Chapter 10. Risks of Doing Business Internationally	197
Chapter 11. Managing to Maximize Firm Value	215
Chapter 12. Venture Exits	233
Classaers	2.47
Glossary	247
References	257
Index	265

Chapter 6. Financial Projections for the Firm	81
Case: Desert Divers	81
Types (i.e., Forms) of Projections	84
Models and Methodologies	94
Dealing With Data (or Lack of Data)	99
Revenue and Costs Relationships	105
Seasonal Adjustment and Patterns	106
Summary	110
Chapter 7. Cost of Capital and Capital Budgeting	113
Case: Mill Pro, Inc.	113
Weighted Average Cost of Capital	115
The Cost of Equity (RRR <sub>equity</sub> )	116
The Cost of Debt (RRR <sub>debt</sub> )	124
The Cost of Preferred Stock (RRR <sub>pfd</sub> )	126
International Issues With Respect to	
RRR Calculations for Capital Components	127
Making the Weighted Average Cost of	
Capital (WACC) Computation	128
What Is the Firm's Capital Structure?	128
Summary and Special Notes Regarding	
the WACC Computation	129
Capital Budgeting	130
Example of a Capital Budgeting Problem	131
Summary	137
Chapter 8. Valuation	139
Case: Franks Brothers LLC	139
Concepts of Value	142
The Valuation Process	145
Three Main Valuation Methodologies	
of an Operating Firm	146
Valuing the Operating Firm	
Using Discounted Cash Flow Analysis (DCF)	147
Valuing the Operating Firm	
Using Net Asset Value (NAV)	150
Valuing Intangible Property (Intangibles)	155
Unique Tax Considerations, Contingencies,	
and Subsequent Events	161
Adjustments for Discounts or Premiums	165
Assembling a Valuation	168
Summary	169

Chapter 9. Raising Capital	171
Case: Kickstarter.com	171
Types of Capital	173
The Capital-Raising Process	174
Financing Stages	175
Sources of Capital	175
Meeting Capital Formation and Resource Needs	175
Bootstrapping	176
Creative Ways to Bootstrap	177
Equity Capital	180
Private (Angel) Investors	180
Venture Capital Firms	181
Crowdfunding	183
Debt Capital	186
Securities Law and Regulations	191
Basic Securities Laws of the United States	192
Summary	195
Chapter 10. Risks of Doing Business Internationally	197
Case: Baja'd Out Clothing Company	198
Foreign Exchange (Forex) Risks	199
Quantifying Currency Risk	199
Natural, Reporting, and Local Currency	200
Transaction Risk	201
Translation Risk	202
Hedging Forex Risk	205
Taxes	209
Other Risks Related to Doing Business Internationally	210
Summary	213
	213
Chapter 11. Managing to Maximize Firm Value	215
Case: Uni-Net	215
Key Aspects to Value	217
Certainty of Cash Flows	217
Grow the Firm	218
Market Position Is Important: Document and	
Publicize Your Success	219
Build Intangible Value and Organization	220
A Flat, Flexible Organization With a Productive	
Workforce Is Valuable	221
Update the Firm's Planning Model	222
Develop a Useful Historical Database	223

Management Must Be Held Accountable for Results	223
Tailor Pay and Incentives to Results	224
Lower the Risk Profile	225
Liquidity Risk	225
Operating Leverage	226
Financial Risk	228
Worst-Case Scenarios	229
Risk Assessment as a Routine	229
Back Testing	230
Sensitivity and Scenario Testing	231
Simulation	231
Summary	232
Chapter 12. Venture Exits	233
Case: Camera+ Photo Software Application by Tap Tap Tap	233
Types of Exits	235
Security Markets	236
Strategic Buyer	238
Retained Earnings	240
Cash-Out Structures	241
Pricing a Transaction	242
Venture Capital Method	244
Summary	245
Glossary	247
References	257
Index	265

## Chapter 1

# The Entrepreneurial Challenge

#### A Global Perspective

#### Learning Objectives

- To understand the importance of entrepreneurial finance
- To introduce the different types of entrepreneurs
- To expose the challenges associated with being an entrepreneur
- To identify the traits of global entrepreneurs
- To understand what is different about entrepreneurial finance

#### Case: CEON Solutions Pvt. Ltd.

Abhay Panjiyar, a young engineer in his second year of engineering school, had an idea while he was creating an effective administration process for Bhopal, an India-based education nongovernmental