

# PRIVATE EQUITY

Fund Types, Risks and Returns,  
and Regulation



*Douglas Cumming, Editor*

**KOLB SERIES IN FINANCE**

Essential Perspectives

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# PRIVATE EQUITY

## Fund Types, Risks and Returns, and Regulation

**Douglas Cumming**

The Robert W. Kolb Series in Finance



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# CHAPTER 1

## Introduction to Private Equity

### DOUGLAS CUMMING

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### INTRODUCTION

Private equity markets experienced a golden age up to the second quarter of 2007 (Shadab 2009). The massive amounts of capital flowing to private equity funds up to this period are highlighted on an absolute and relative basis in [Exhibits 1.1](#) and [1.2](#), respectively. This rise of the private equity mark has been attributed to the superior governance model of private equity relative to the publicly traded corporation (Jensen 1989), regulatory costs of being a publicly traded company (see more generally, e.g., Bushee and Leuz 2005), the comparatively low price of debt finance up to the second quarter of 2007 (Acharya et al. 2007; Kaplan 2007), the rise of the hedge funds (Acharya et al. 2007; Shadab 2007) and sovereign wealth funds (Fotak et al. 2008; Bortolotti et al. 2009), among other things.

The collapse in private equity since mid-2007 can be explained perhaps most directly by the collapse in credit markets and inability to effectively leverage private equity investments. Further, there are diseconomies of scale in managing private equity funds (Kanniainen and Keuschnigg 2003, 2004; Cumming 2006; Bernile et al. 2007; Cumming

and Dai 2008; Cumming and Walz 2009; Lopez de Silanes and Philappou 2009). Funds grew too large leading up to 2009, thereby leading to too much money chasing too few quality deals, inefficient due diligence, and too little value-added provided by fund managers. The crisis has brought on increasing calls for regulation of private equity funds (Cumming and Johan 2009), as well as hedge funds (Verret 2007; Cumming and Dai 2007, 2009) and sovereign wealth funds (Epstein and Rose 2009).

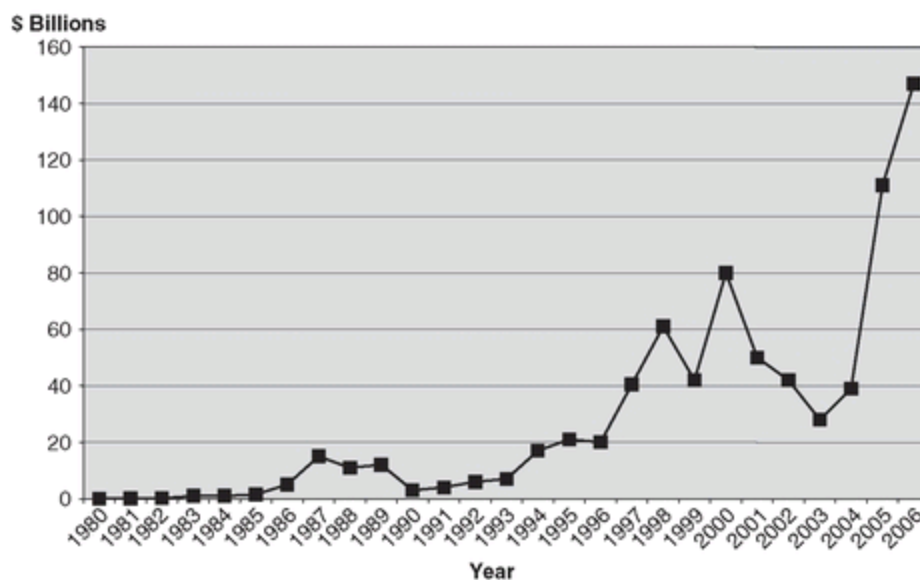
In the 1980s and 1990s, there was comparatively little academic work on private equity finance. This gap in the literature was largely attributable to a dearth of systematic private equity data. More recently, however, there has been a growing number of academics who have taken an interest in the topic and have collected systematic data for empirical studies both in the U.S. context and abroad. This empirical work has in turn inspired theoretical analyses of private equity finance. As of 2009 there are a significant number of academics who have contributed greatly to our understanding of private equity markets.

This book provides a comprehensive view of private equity by describing the current state of research to better understand the current state of the private equity market. The chapters herein discuss the structure of private equity funds and fund-raising, the structure of private equity investments with investees, financial and real returns to private equity, and international perspectives on private equity and the regulation of private equity markets. This book is organized into four parts that collectively cover each of these areas, as explained below. This brief introduction serves as a road map to the range of topic areas covered in this book.

**Exhibit 1.1** Commitments to U.S. Private Equity Partnership, 1980-2006

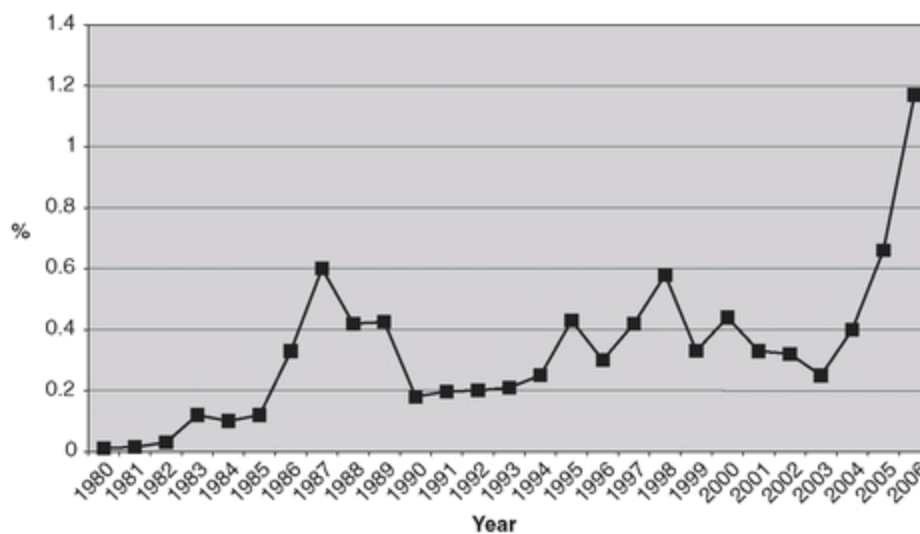


*Source:* Acharya et al. (2007), Kaplan (2007), Venture Economics database.



**Exhibit 1.2** Commitments to U.S. Private Equity Partnerships as a Fraction of Total Stock Market Capitalization, 1980-2006

*Source:* Acharya et al. (2007), Kaplan (2007), Venture Economics database.



Part One of this book covers the structure of private equity funds and fundraising. In Chapter 2, Grant Fleming analyzes institutional investment in private equity, including motivations for limited partnership private equity investment, strategies for achieving objectives and evidence on performance. Sridhar Gogineni and William Megginson in Chapter 3 analyze the recent phenomenon of the public listing of private equity funds, with funds like Blackstone selling equity in their fund on stock exchanges. In Chapter 4, Bastian Bergmann, Hans Christophers, Matthias Huss and Heinz Zimmermann provide a further analysis of the overall listed private equity market, with detailed statistical information on structure and performance.

Part Two of this book focuses on the structure of private equity investments with their investee firms. In Chapter 5, Andy Lockett, Miguel Meuleman, and Mike Wright describe the practice of syndication in the private equity industry. In Chapter 6, Gennaro Bernile, Douglas Cumming, and Evgeny Lyandres present theory and evidence on the structure of private equity fund portfolios, and the efficient size of private equity portfolios in terms of the number of investees per fund manager.<sup>[1](#)</sup> Alternative forms of private equity investments have emerged in the twenty-first century, particularly a growing importance of PIPE (private investments in public equity) investments, which are examined in Chapter 7 by Na Dai. In Chapter 8, Cécile Carpentier and Jean-Marc Suret empirically analyze private placements in the Canadian market in view of the interesting lessons from the institutional setting in Canada. In Chapter 9 Stefano Gatti and Chiara Battistini explore the convergence of hedge fund and private equity investment activities, and provide an international context of this convergence in practice.

Part Three of this book considers both financial and real returns to private equity. The financial returns to private equity are difficult to measure, as private equity investments are held with the view towards capital gain, and it typically takes at least a few years before an exit event (such as an IPO, acquisition, secondary sale, buy-back or write-off) can come to fruition. Hence, private equity fund returns have a mix of exited and unexited investments at any given point in time. Simulated returns in private equity are studied in Chapter 10 by Axel Buchner, Philipp Krohmer, Daniel Schmidt, and Mark Wahrenburg. Value creation in buyout transactions are discussed in Chapter 11 by John Chapman and Peter Klein. In order to secure additional capital from their investors, private equity fund managers often exaggerate the value of their unexited portfolio. These and related issues in measuring the financial returns to private equity are discussed in Chapter 12 by Ludovic Phalippou.<sup>2</sup> Oliver Gottschalg discusses appropriate things to consider for due diligence when selecting private equity funds in Chapter 13. But returns to private equity are not just about financial rewards; that is, private equity may also significantly influence the value of investee companies in terms of the productivity (as discussed in Chapter 14 by Don Siegel) and employment (as discussed in Chapter 15 by Robert Cressy).

Part Four of this book provides analyses of international differences in private equity markets, many of which are attributable to legal and regulatory factors. In Chapter 16 Douglas Cumming, Andrej Gill, and Uwe Walz describe a need for the role of regulation in curbing overreporting behavior by private equity funds in terms of inflating unexited returns that are reported to institutional investors. Joe McCahery and Eric Vermeulen discuss further reporting standards and other methods to regulate private equity funds. International private equity flows are studied in

Chapter 18 by Sophie Manigart, Sofie De Prijcker, and Bivas Bose. Alexander Groh provides empirical evidence on private equity in emerging markets in Chapter 19. Laura Bottazzi considers private equity developments in Europe in Chapter 20. Specific country studies on private equity in Europe are provided by Simona Zambelli for Italy (Chapter 21), Wolfgang Bessler, Julian Holler, and Martin Seim for Germany (Chapter 22), Morten Bennedsen, Kasper Meisner Nielsen, Søren Bo Nielsen, and Steen Thomsen for Denmark (Chapter 23). Finally, Canada's experience with regulation and phasing out inefficient legislation in recent years is empirically examined by Douglas Cumming and Sofia Johan in Chapter 24.

Specific features of earlier stage venture capital deals are not the focus of this volume, but are examined in detail in the *Companion to Venture Capital*, a related volume published by John Wiley & Sons in the Companion to Finance Series. There are various other topics related to private equity and other authors have made important contributions, many of which are highlighted in each of the chapters herein. Areas where further research is needed are likewise highlighted in each chapter. In view of the empirically documented importance of private equity as an efficient governance model, we hope and expect private equity research will help guide the theoretical understanding and practical implementation among students, academics, practitioners, and policymakers alike. The contributions in each of the chapters in the *Companion to Private Equity* likewise provide insights into the current state of the market and how the market is likely to evolve over coming years in terms of fund structures, fund-raising, investment structures, financial and real returns, and regulation.

## NOTES

1 For related work see Kannianen and Keuschnigg (2003, 2004) and Keuschnigg (2004).

2 See also Cumming and Walz (2009), Phalippou and Zullo (2005), and Lopez-de-Silanes and Phalippou (2009).

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## **ABOUT THE EDITOR**

**Douglas Cumming**, B.Com. (Hons.) (McGill), M.A. (Queen's), J.D. (University of Toronto Faculty of Law), Ph.D. (Toronto), CFA, is an Associate Professor of Finance and Entrepreneurship and the Ontario Research Chair at the Schulich School of Business, York University. His research is primarily focused on law and finance, market surveillance, hedge funds, venture capital, private equity, and IPOs. His work has been presented at the American Finance Association, the Western Finance Association, the European Finance Association, the American Law and Economics Association, the European Law and Economics Association, and other leading international conferences. His recent



publications have appeared in numerous journals, including the *American Law and Economics Review*, *Cambridge Journal of Economics*, *Economic Journal*, *European Economic Review*, *Financial Management*, *Journal of Business*, *Journal of Business Venturing*, *Journal of Corporate Finance*, *Journal of Empirical Legal Studies*, *Journal of International Business Studies*, *Oxford Economic Papers*, and *Review of Financial Studies*. He is the coauthor (along with his wife, Sofia Johan) of the new book *Venture Capital and Private Equity Contracting: An International Perspective* (Elsevier Science Academic Press, 2009, 770 pp.). His work has been reviewed in numerous media outlets, including *Canadian Business*, the *Financial Post*, and *The New Yorker*. He was the recipient of the 2004 Ido Sarnat Award for the best paper published in the *Journal of Banking and Finance* for a paper on full and partial venture capital exits in Canada and the United States. As well, he received the 2008 AIMA Canada-Hillsdale Research Award for his paper on hedge fund regulation and performance, and the 2009 Best Paper Award from the Canadian Institute of Chartered Business Valuators for his paper on private equity valuation and disclosure. He is a research associate with the Paolo Baffi Center for Central Banking and Financial Regulation (Bocconi University), Groupe d'Economie Mondiale at Sciences Po (Paris), Capital Markets CRC (Sydney), Venture Capital Experts (New York), Cambridge University ESRC Center for Business Research, Center for Financial Studies (Frankfurt), Amsterdam Center for Research in International Finance, and the University of Calgary Van Horne Institute. He has also consulted for a variety of governmental and private organizations in Australasia, Europe, and North America, and most recently is working with Wilshire Associates.

# PART I

## **The Structure of Private Equity Funds and Fund-Raising**

# CHAPTER 2

## **Institutional Investment in Private Equity**

### **Motivations, Strategies, and Performance**

#### **GRANT FLEMING**

Managing Director, Wilshire Private Markets and Visiting Fellow, Australian National University

### **INTRODUCTION**

The supply of capital for private equity comes from a variety of investors. Banks and corporations have for a long time invested in the equity of private companies in order to gain financial and strategic benefits for their businesses. Over the last 20 years endowments, foundations, and pension funds have allocated a proportion of their assets to private equity, primarily through intermediaries (fund managers) managing venture capital, leveraged buyout and distressed asset funds. The historical returns enjoyed by early movers into the asset class has encouraged large inflows of capital, and subsequent growth in the size and depth of the funds management industry specializing in private equity investments.

This chapter examines the motivations, investment structure and strategies, and returns related to institutional investment in private equity. First, the chapter describes the different types of investors and their motivations to supply

funding to private companies. Next, alternative implementation models and investment structures are reviewed. Finally, the chapter assesses the empirical evidence on the returns (and risks) institutional investors have received in the asset class.

## **INSTITUTIONAL INVESTMENT: MOTIVATIONS AND BEHAVIOR**

Private capital markets comprise an important part of the financial system, providing intermediation between sources of funds (savings) and private companies seeking risk capital. Private equity is a growing proportion of private capital markets, although its relative size is most noticeable in the developed Western economies of the United States and United Kingdom. The sources of capital for private equity take a variety of forms driven by the motivation and investment behavior of the funding institution. Some institutions seek to invest in private equity in order to improve absolute returns of their investment portfolios. These “return focused” investors tend to be relatively sophisticated, long term, and committed to their investment programs. However, private equity is also sourced from nonfinancial return institutions, which can have broader motivations associated with strategic (banks, corporations) and public policy (government) goals.

[Exhibit 2.1](#) shows the type of investors who invest in private equity in the United States and Europe, taken from recent data on sources of fund-raising. The data shows a moment in time rather than sources of finance since inception, but is nevertheless instructive.

Institutional investors (pension funds, endowment, foundations and fund-of-funds) comprise 71 percent of

private equity capital in the United States and 36 percent in Europe. Pension funds comprise the majority of capital in the United States, whereas financial institutions are the largest group in Europe (almost twice the proportion as in the United States). Intermediation also varies across markets, with fund-of-funds three times more important as a source of capital in Europe than the United States. The large proportion of sources categorized as “Others” in Europe is largely due to the use of public capital markets as a funding source.

The key motivations to invest into private equity are shown in [Exhibit 2.2](#) for three types of investors—institutional investors (professionally operated organizations with the mandate to invest capital on behalf of beneficiaries), banks (and other financial institutions) and corporations, and governments. We have also identified for each investor their sources of funding, and the approach they tend to adopt in order to gain access to private companies.

**[Exhibit 2.1](#)** Types of Private Equity Investors: United States and Europe

[Exhibit 2.1](#) presents the type of investors for the United States and Europe, as determined by the amount of capital the investor committed to private equity. U.S. data is for capital committed to private equity in 2006, and Europe data is for capital committed in 2007. “Others” category includes capital raised from public capital markets and government funding.

*Source:* U.S. data from Thomson Financial/National Venture Capital Association; Europe data from the European Venture Capital Association.