CHAPTER 1

Introduction to the Companion to Venture Capital

DOUGLAS CUMMING
Associate Professor and Ontario Research Chair,
York University—Schulich School of Business

INTRODUCTION

Venture capital is often referred to as the "money of invention" (see, e.g., Black and Gilson 1998; Gompers and Lerner 1999; Kortum and Lerner 2000), and venture capital fund managers as those that not only provide the money but also other value-added resources to entrepreneurial firms. Venture capital fund managers play a significant role in enhancing the value of their entrepreneurial investments as they provide financial, administrative, marketing, and strategic advice to entrepreneurial firms, as well as facilitating a network of support for an entrepreneurial firm with access to the best accountants, lawyers, investment bankers, and organizations specific to the industry in which the entrepreneurial firm operates (Sahlman 1990; Sapienza, Manigart, and Vermeir 1996; Gompers and Lerner 1999; Manigart et al. 2002, 2006; Leleux and Surlemont 2003; Wright and Lockett 2003). In terms of innovativeness (Kortum and Lerner 2000), profitability, and share price performance upon going public (Gompers and Lerner 1999), academic studies have shown that entrepreneurial firms backed by venture capital are on average significantly more successful than entrepreneurial firms that are not.

There are massive differences in the size and success of venture capital markets around the world. These differences have been attributable to differences in shareholder protection (Jeng and Wells 2000), government venture capital funds and other government policies (Jääskeläinen, Maula, and Murray 2007; Keuschnigg and Nielsen 2001, 2003a,b, 2004a,b), bankruptcy laws and capital gains taxes (Armour and Cumming 2006), and the strength of a country's stock market (Black and Gilson 1998). International differences in the size and success of venture capital and private equity markets are highlighted for select European and North American countries in Exhibit 1.1. As governments around the world recognize that entrepreneurship and innovation are important drivers of economic growth and that venture capital is an important source of capital for entrepreneurship and innovation, there has been a growing interest in rigorous theoretical and empirical analyses of venture capital markets worldwide.

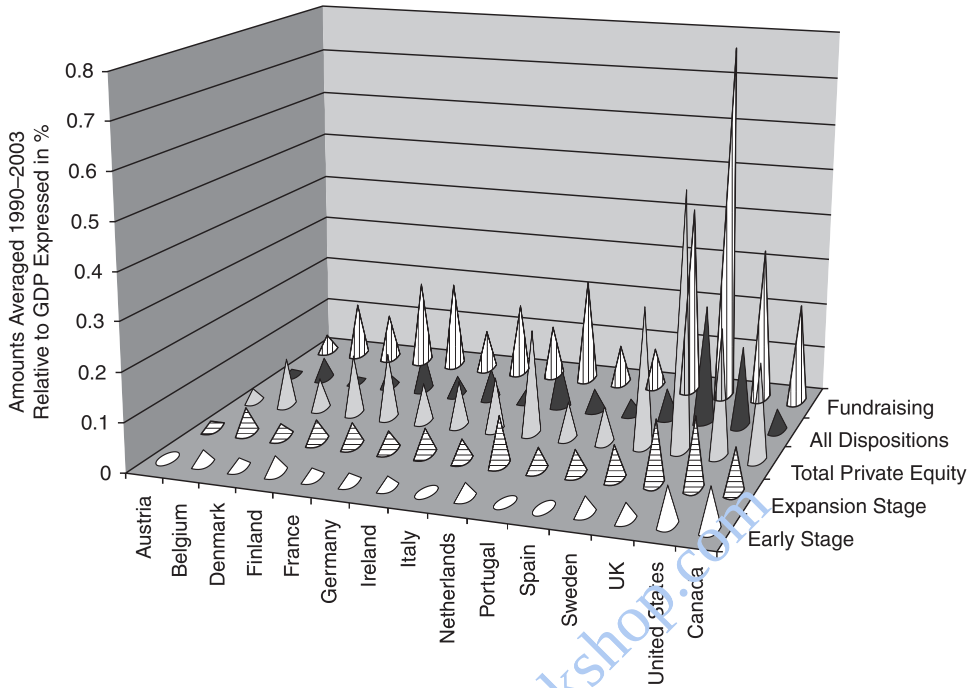

Exhibit 1.1 Size of Venture Capital and Private Equity Markets Across Countries
Source: Armour and Cumming (2006).

In the 1980s and 1990s, there was comparatively little academic work on venture capital finance. This gap in the literature was largely attributable to a dearth of systematic venture capital data. More recently, however, there have been a growing number of academics that 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 venture capital finance. As at 2009 there are a significant number of academics that have contributed greatly to our understanding of venture capital markets. These studies include, but are not limited to, work on fund-raising and fund structure, the nature of financing agreements with entrepreneurs, exit transactions and returns, impacts on regional development and employment, and international differences that are attributable to public policy, as well as legal and other factors. In view of these significant and rapid developments in the literature, a comprehensive review of the literature in a unified source is not only desirable but indeed essential.

The purpose of this book is to provide a comprehensive view of venture capital by describing the current state of research and practices on this topic. The chapters included here discuss sources of capital (angel investment, limited partnerships, corporate funds, government funds), due diligence, financial contracts and monitoring, the efficiency implications of VC investment, investment returns and performance, international differences in venture capital markets, and regulation and public policy. This book is organized into five parts, which collectively cover each of these areas, as explained below. This brief introduction serves as a roadmap to the range of topic areas.

Part One of this book begins with a review of alternative forms of venture capital. In Chapter 2, Andrew Zacharakis explains some of the unique features of venture capital markets, including how venture capitalists source deals, screen investments, and negotiate deals. The ways in which venture capital finance differs from bank finance is explained by Jean Etienne de Bettignies in Chapter 3. In Chapter 4, Vladimir Ivanov and Fei Zie explain differences between corporate venture capital funds and limited partnerships. Andrew Wong analyzes differences between venture capital and angel investment in Chapter 5 and focuses on unique features of financing from earlier-stage angel investors. In Chapter 6, Darek Klonowski analyzes the connection between business incubators and venture capital. Thereafter, Luisa Alemany and Mariarosa Scarlata describe in Chapter 7 the philanthropic model of venture capital, a model that has been significantly growing in importance in recent years as this market segment continues to expand.

Part Two of this book highlights the structure of venture capital investments. Venture capitalists write detailed contracts that separately allocate cash flow and control rights. These contracts have the potential to significantly affect the performance of venture capital–backed firms. Catherine Casamatta and Roberta Dessi in Chapters 8 and 9, respectively, explain how venture capital contracts influence the incentives for venture capital fund managers to monitor and advise their portfolio firms.[1] In Chapter 10, Dima Leschinskii explains how investment structures and portfolio design for a venture capitalist can influence venture capitalist investment activities and outcomes.[2] In Chapter 11, Dirk De Clercq and Dimo Dimov examine the role of syndication in venture capital, including the rationales for syndication and the implications of syndication for investment performance.

Part Three of this book examines various aspects of the role of venture capitalists in adding value to their investee firms. In Chapter 12, John Hand provides evidence on how venture capital–backed firms mature over time. Empirical evidence on the various things that venture capitalists do to add value to their investees is reviewed in Chapter 13 by Tom Chemmanur, Karthik Krishnan, and Debarshi Nandy. The role of venture capital in stimulating innovation is studied in Chapter 14 by Masako Ueda. There are significant differences in the reputations of different venture capital funds; the implications of these reputational effects are discussed in Chapter 15 by Rajarishi Nahata. Of course, not all venture capitalists are of sound repute, and sometimes venture capitalists take advantage of their investee firms. These governance issues in venture capital are discussed by Brian Broughman in Chapter 16. Conflicts of interest between venture capitalists and their investees are analyzed in Chapter 17 by Vladimir Atanasov.

Part Four of this book examines drivers of venture capitalists' returns. Because venture capital–backed firms typically do not have cash flows to pay interest on debt or dividends on equity, venture capitalists seek capital gains by exiting from their investments. The five main exit routes are initial public offerings, acquisitions, secondary sales, buy-backs and write-offs, as explained by Armin Schwienbacher in Chapter 18. Factors that influence the financial return to venture capital–backed firms are surveyed by Mike Wright and Riya Chopraa in Chapter 19. Whether or not venture capitalist control helps or hinders venture capital–backed firms is empirically studied in Chapter 20 by April Knill.

Finally, Part Five of this book examines international differences in venture capital and the role of public policy. It is worthwhile to provide a comparative perspective on international venture capital markets to understand how and why venture capital markets differ across countries in terms of size and success, and the role of government policy in stimulating venture capital investment and international venture capital investment. Markku Maula explores cross-border venture capital investment activities in Chapter 21. Unique features of venture capital in Canada are analyzed in Chapter 22 by Cécile Carpentier and Jean-Marc Suret, which is interesting to examine given the large amount of public subsidies in Canada, and the relatively low level of success of those government expenditures. To understand why government-created venture capital programs are difficult to implement in practice, it is useful to have a strong theoretical perspective. Christian Keuschnigg theoretically examines the role of public policy for stimulating venture capital finance in Chapter 23.[3] Finally, practical lessons on the role of government policy in stimulating venture capital and private equity are offered by Gordon Murray and David Lingelbach in Chapter 24.

Specific features of later-stage private equity deals are not covered in this volume, but are covered in *The Companion to Private Equity*, a related volume published by Wiley in the Companion to Finance Series. There are various other topics related to entrepreneurial finance, 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 venture capital in stimulating entrepreneurship, innovation, and economic growth, we hope and expect that venture capital research will help guide the theoretical understanding and practical implementation among students, academics, practitioners, and policy makers alike.

NOTES

1. Note that in practice, venture capital contracts differ significantly across countries. Most notably, for entrepreneurs resident in the United States, venture capitalists typically use convertible preferred securities in their contracts, and the use of this security has been attributed to unique aspects of U.S. tax practice (Gilson and Schizer 2003), in addition to theoretical arguments that this security is uniquely optimal. However, in all other countries and regions around the world where venture capital contracting data have been collected—including Canada, Europe, and various developing countries—venture capitalists use a variety of securities, and convertible preferred equity has not been the most frequently used security (Cumming 2005, 2008; Lerner and Schoar 2005; Kaplan, Martel, and Strömberg 2007; Cumming and Johan 2009). One explanation for the use of these different securities is that agency problems differ across different transactions, and efficient security design varies depending on which agency problems are most pronounced in the particular transaction.
2. For related work, see Kanniainen and Keuschnigg (2003, 2004) and Keuschnigg (2004).
3. For related work, see, e.g., Keuschnigg (2004), Keuschnigg and Nielsen (2001, 2003a, b, 2004a, b), and Jääskeläinen, Maula, and Murray (2007).

REFERENCES

Armour, J., and D. J. Cumming. 2006. The legislative road to Silicon Valley. *Oxford Economic Papers* 58:596–635.

Black, B. S., and R. J. Gilson. 1998. Venture capital and the structure of capital markets: Banks versus stock markets. *Journal of Financial Economics* 47:243–277.

Cumming, D. J. 2005. Capital structure in venture finance, *Journal of Corporate Finance* 11:550–585.

——. 2008. Contracts and exits in venture capital finance. *Review of Financial Studies* 21:1947–1982.

——, and S. A. Johan. 2009. *Venture capital and private equity contracting: An international perspective*. San Diego: Elsevier Science Academic Press.

Gilson, R., and D. Schizer. 2003. Venture capital structure: A tax explanation for convertible preferred stock. *Harvard Law Review* 116:875–916.

Gompers, P. A., and J. Lerner. 1999. *The venture capital cycle*. Cambridge: MIT Press.

Jääskeläinen, M., M. Maula, and G. Murray. 2007. Performance of incentive structures in publicly and privately funded "hybrid" venture capital funds. *Research Policy* 36:7, 913–929.

Jeng, L., and P. Wells. 2000. The determinants of venture capital funding: Evidence across countries. *Journal of Corporate Finance* 6:241–89.

Kanniainen, V., and C. Keuschnigg. 2003. The optimal portfolio of start-up firms in venture capital finance. *Journal of Corporate Finance* 9:521–534.

——. 2004. Start-up investment with scarce venture capital support. *Journal of Banking and Finance* 28:1935–1959.

Kaplan, S. N., F. Martel, and P. Strömberg. 2007. How do legal differences and experience affect financial contracts? *Journal of Financial Intermediation* 16:273–311.

Keuschnigg, C. 2004. Taxation of a venture capitalist with a portfolio of firms. *Oxford Economic Papers* 56:285–306.

——, and S. B. Nielsen. 2001. Public policy for venture capital. *International Tax and Public Finance* 8:557–572.

——, and S. Bo Nielsen. 2003a. Tax policy, venture capital and entrepreneurship. *Journal of Public Economics* 87:175–203.

——, and S. Bo Nielsen. 2003b. Taxes and venture capital support. *Review of Finance* 7:515–538.

——, and S. Bo Nielsen. 2004a. Progressive taxation, moral hazard, and entrepreneurship. *Journal of Public Economic Theory* 6:471–490.

——, and S. Bo Nielsen. 2004b. Start-ups, venture capitalists and the capital gains tax. *Journal of Public Economics* 88:1011–1042.

Kortum, S., and J. Lerner. 2000. Assessing the contribution of venture capital to innovation. *RAND Journal of Economics* 31:674–692.

Leleux, B., and B. Surlemont. 2003. Public versus private venture capital: Seeding or crowding out? A pan-European analysis. *Journal of Business Venturing* 18:81–104.

Lerner, J., and A. Schoar. 2005. Does legal enforcement affect financial transactions? The contractual channel in private equity. *Quarterly Journal of Economics* 120: 223–246.

Manigart, S., K. De Waele, M. Wright, K. Robbie, P. Desbrières, H. Sapienza, and A. Beekman. 2002. The determinants of the required returns in venture capital investments: A five-country study. *Journal of Business Venturing* 17:291–312.

Manigart, S., A. Lockett, M. Meuleman, M. Wright, H. Landstrom, H. Bruining, P. Desbrieres, and U. Hommel, 2006. Venture capitalists' decision to syndicate. *Entrepreneurship Theory and Practice* 30:131–153.

Sahlman, W. A. 1990. The structure and governance of venture capital organizations. *Journal of Financial Economics* 27:473–521.

Sapienza, H., S. Manigart, and W. Vermeir. 1996. Venture capital governance and value-added in four countries. *Journal of Business Venturing* 11:439–469.

Wright, M., and A. Lockett. 2003. The structure and management of alliances: Syndication in the venture capital industry. *Journal of Management Studies* 40:2073–2104.

ABOUT THE AUTHOR AND 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 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* (San Diego: Elsevier Science Academic Press, 2009). 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. In addition, he received the *2008 AIMA Canada-Hillsdale Research Award* for his paper on hedge fund regulation and performance, and the 2009 Canadian Institute for Chartered Business Valuators Award for his paper on private equity returns and disclosure around the world. 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.