

VENTURE CAPITAL

International Comparisons



Edited by
MILFORD B. GREEN



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London and New York

First published 1991

by Routledge

11 New Fetter Lane, London EC4P 4EE

Simultaneously published in the USA and Canada

by Routledge

a division of Routledge, Chapman and Hall, Inc.

29 West 35th Street, New York, NY 10001

© 1991 Milford B. Green

Printed in Great Britain by

Billing & Sons Ltd, Worcester

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British Library Cataloguing in Publication Data

Venture capital: international comparisons

1. Venture capital investment

I. Green, Milford B.

332.63

ISBN 0-415-04207-0

Library of Congress Cataloguing in Publication Data

Venture capital: international comparisons/edited by Milford

B. Green.

p. cm.

Includes bibliographical references and index.

ISBN 0-415-04207-0

1. Venture capital. 2. Venture capital—United States. .

I. Green Milford B.

HG4751.V47 1991

332'.0415—dc20

90-47733

CIP

Preface

The literature on venture capital has exploded in the last decade, mirroring its growth as an important financial partner in new firm development. The willingness of venture capitalists to undertake investment in enterprises that may be considered too risky by more conventional financial sources has fired the imagination of writers on the subject. Much of the literature is based on anecdotal evidence that portrays venture capitalists as mavericks helping transform economies through investment in high technology. While there is some truth in this characterization, it is only part of the story. A missing component in the literature on the subject is an examination on the broader regional impacts of venture capital investment. Additionally, most studies describe only the US experience. While this is to be expected, given the size and maturity of the US venture capital market, a description of venture capital in other nations could prove instructive. This volume addresses these two components of venture capital research, a concern with regional and national impacts and a description of non-US venture capital investment.

The genesis for this volume came from a meeting held at the Phoenix meetings of the American Association of Geographers in 1988. Many of the contributors to the volume attended this meeting and discussed the emerging geographic literature on venture capital. The level of interest in venture capital by geographers has risen rapidly. The body of literature is expanding rapidly as is the diversification of viewpoints and research approaches on the subject. This volume reflects this diversification of approach both methodologically and regionally. The single unifying theme is a concern with the geography of venture capital. Some may see this as a weakness, but in fact it is a strength. More insight is likely to be gained from a variety of approaches than a single unified approach.

The major geographic contributions to the venture capital literature up to late 1989 are summarized by Rod McNaughton in Chapter One, *Venture Capital: The Developing Literature*. He divides the literature into a convenient classification of locational studies, market taxonomies, specialization studies, and economic impact studies.

Using these as a classification scheme, Chapter Two, *Preferences for US Venture Capital Investment* by Milford Green, provides a macro level specialization study of the investment preferences of venture capital firms in the United States for the period since 1972. The assumption explicit in this chapter, that stated preference reflects actual investment, is tested to a degree in Chapters Three and Four. Chapter Three, *Venturing on the 'Third Coast': Recipient Firms in the Central States* by Chris Thompson, evaluates the investments of 'Third Coast' venture capital firms in a locational context. He finds that the interior portion of the United States exhibits different investment patterns from those found on the East and West Coasts. The majority of venture capital investment is not in high technology but in manufacturing.

Chapter Four, *Regional Patterns of Venture Capital Investment* by Richard Florida, Donald F. Smith Jr, and Elizabeth Sechoka, provides a detailed description of actual investments for each region of the United States. They argue that the location of venture capital investment closely follows the distribution of high-technology firms. The centers of venture capital finance, such as New York, are not the targets of venture capital investment but are net exporters of capital. There are, then, sources and sinks in the venture capital landscape.

The last chapter on the US venture capital industry is by Chris Thompson. *What Do We Know About the Geography of US Venture Capitalists?* (Chapter Five) provides an alternative view of venture capital by studying the characteristics of the venture capitalists themselves. This study is the first systematic attempt to study the characteristics of educational and work locations of venture capitalists rather than the investments themselves. The stereotypical venture capitalist is thought to be a middle-aged Harvard MBA. Thompson shows that this is not the case. He also shows that venture capitalists are not diffusing down the urban hierarchy in a systematic way. Different cities of the same size do not exhibit equal numbers of venture capitalists.

Martin Perry, the author of Chapter Six, *The Rise and Fall of Venture Capital in New Zealand*, provides an interesting case study

of the birth and death of a national venture capital industry. His chapter illustrates the fragility of such an industry when subjected to government initiatives and stock market fluctuations. As with the other chapters, Perry finds that a regional bias exists in venture capital placement.

Rod McNaughton provides a description of another small venture capital industry in his description of the Canadian case. Venture Capital in Canada (Chapter Seven) provides a detailed description of the Canadian venture capital industry, its office locations, and investment characteristics. His description of the historical evolution of venture capital in Canada shows a similarity to that experienced in the United States and the United Kingdom.

The actively growing venture capital market in the United Kingdom is chronicled by Colin Mason and Richard Harrison in their chapter, Venture Capital, the Equity Gap and the 'North-South Divide' in the United Kingdom. The impact of governmental involvement in venture capital is ably discussed in this chapter. The problem of regional disparities in venture capital investment seems to be of more concern in the United Kingdom than elsewhere. Many of the initiatives discussed could have lessons for other nations wanting to use venture capital as an engine of growth. In particular the role of Enterprise Boards is most instructive.

The final chapter entitled Asian Venture Capital: Financing Risk Opportunities in the Pacific Rim by Thomas Leinbach provides a fascinating description of the newly emerging venture capital markets of Asia. In contrast with the venture capitalists of other regions, investment is more outward looking. The use of venture capital as a linking mechanism is a different goal than that pursued by venture capitalists in the West.

Having introduced the chapters I now leave the reader to explore venture capital in various countries as described in the rest of this volume.

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1 Venture capital: the developing literature

Rod B. McNaughton

Venture capital is unique as it plays an interstitial role between many actors that are individually of interest to researchers in several disciplines. Venture capital is related to such diverse topics as pension fund investment, corporate finance, leveraged buyouts, small business management, entrepreneurship, business incubators, technology transfer, and economic development. The study of the venture capital market itself is largely the domain of business and economic researchers who have shown concern for:

- (1) the investment decision-making behavior of venture capitalists,
- (2) the performance of venture capital portfolios, and
- (3) the availability and cost of venture capital.

The interest of researchers has followed that of the business community as a whole: when levels of investment are high, so is interest in venture capital research. There were many publications in the late 1960s and early 1970s, and a paucity throughout the late 1970s and early 1980s, followed by a recent increase. In part, this is the result of the introspective nature of the industry, which sponsors a significant amount of research in its efforts to lobby governments for legislative changes. The funding of this research is coordinated through national venture capital organizations, such as the Association of Canadian Venture Capital Companies, the National Venture Capital Association, and the National Association of Small Business Investment Companies. A second impetus for venture capital research comes from various government programs concerned with the adequate funding of small business, for example, the Technological Innovation Studies Program (TISP) in Canada, the Experimental Technology Incentive Program (ETIP) in the United States, and several US Senate Select Committees and Congressional Hearings on small business. The TISP, for example, has sponsored

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more than eighty research projects on entrepreneurship, technology, and small firms.

The latest round of venture capital research is distinct from earlier work in two respects: (1) the topics addressed are more specific and (2) a wider range of perspectives is employed. Of primary importance for economic geographers is the adoption of a spatial component into this research. The distinct regional biases in the venture capital market have not gone unnoticed. Tribus was one of the first to recognize regional variations in venture capital availability:

. . . supplies of venture capital are adequate, but the total supply is not distributed very evenly geographically. And we find that new entrepreneurs do not have access to all of the sources of capital.

(Tribus 1970: 52)

However, the literature throughout the 1970s was concerned with the geographic pattern of investment in the grossest of terms. Anecdotal descriptions (for example, Dominguez 1974) merely suggested the possibility of economic impacts arising from the concentration and regional parochialism evident in the market. It is only within the last 5 years that economic geographers have shown interest in the market, though a history of interest in capital flows extends back several decades.

This chapter provides a brief overview of recent empirical studies of the venture capital market. Particular attention is paid to the contributions of geographers, though a wider context is set by a discussion of research conducted by business researchers.

SPATIAL PERSPECTIVES

Research which explicitly addresses the spatial behavior of the venture capital market can be grouped into four categories: (1) locational studies of venture capital firms and their investments, (2) taxonomies of regional market structures, (3) market specialization, and (4) economic impact (Table 1.1). Most of this research concerns the large and highly developed American venture capital market, but the Canadian, UK and New Zealand markets are also explored. The literature progressed rather quickly from simple empirical descriptions to more sophisticated considerations of the relationship between location, decision-making, and economic impact.

Table 1.1 Summary of venture capital research

<i>Author(s)</i>	<i>Year</i>	<i>Major finding(s)</i>
<i>Locational studies</i>		
Leinbach and Amrhein	1987	Regional concentration in United States
Mason	1987b	Investment concentrated in southeast United Kingdom
Florida and Kenney	1988a	Criticism of Leinbach and Amrhein 1987
Leinbach and Amrhein	1988	Response to Florida and Kenney 1988a
Florida and Kenney	1988b	Venture capital clusters near established financial and high-tech centers
McNaughton and Green	1987b	Regional concentration in Canada, investment flows are regionally biased
Perry	1988a	Investment concentrated in Auckland, New Zealand
<i>Market taxonomies</i>		
McNaughton and Green	1987a	Markets can be grouped according to interconnections between states
Florida and Kenney	1988c	Three types of venture capital agglomerations: high-tech, financial, and mixed
<i>Specialization</i>		
Green and McNaughton	1988a	Market niches, strong distance-decay for investment
Green	1989	Diffusion of firms, market specialization
McNaughton	1989	Specialization affected by competition in market
<i>Economic impact</i>		
Florida and Kenney	1988d	Venture capital provides institutional setting for innovation
McNaughton	1990	Venture-backed firms have above average financial performance

Locational Studies

Leinbach and Amrhein (1987) were the first to examine the regional availability of venture capital and its implication for small high-technology firms. They made two significant contributions: (1) a time series of the location of venture capital sources and (2) tabulation of regional flows of funds data. Leinbach and Amrhein noted a pronounced concentration of sources, with California, New York, Massachusetts, and Illinois accounting for over 75 per cent of the national total. The destination of funds showed an even more concentrated pattern, with the California/Southwest region receiving 45.7 per cent of the nation's total, followed by New England with 15.3 per cent.

Leinbach and Amrhein also attempted to establish a theoretical justification for the geographic analysis of venture capital, suggesting that it contributes to the growing literature on behavioral approaches to industrial location. In addition, they predicted a role for venture capital research in the development of structural theories of external business environments.

Florida and Kenney (1988a) criticized Leinbach and Amrhein for their lack of attention to the structure of the venture capital industry, and for the use of highly aggregate data that obscured important characteristics of the market. In particular, they felt that Leinbach and Amrhein had overestimated the importance of government licensed Small Business Investment Corporations (SBICs), and had mistakenly portrayed informal investors (angels) as part of the institutional industry. Further, they pointed out that the geographic concentration observed in the market is in part a function of the concentration of potential investments and their technological environment. The aggregate nature of the data used by Leinbach and Amrhein hid the extreme concentration of sources in a few cities, and even in a few zip codes (Florida and Kenney 1988b). Florida and Kenney also felt that Leinbach and Amrhein left the impression that considerable long distance investment takes place, when much of this can be accounted for by deal syndication and branch office locations. Leinbach and Amrhein (1988) replied to these criticisms by agreeing that the use of more disaggregate data would have been desirable if they had been available, and reiterating the introductory and exploratory nature of the work.

McNaughton and Green (1987b, 1989) provided an exploratory examination of the geography of Canadian venture capital investment. Surveys were used of both venture capital investors and their