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Financing new ventures in China: System antecedents and institutionalization

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Abstract

China's system for funding new ventures is a relatively recent phenomenon emerging from decades of government-led technology policy and a still-transitioning business system. This paper first proposes a general framework in which this financing system is defined as the country-specific configuration of actors, rules and practices by which investment funds are pooled, investment targets identified, funds invested and monitored, and returns appropriated. The paper uses this framework to link the centralized government system of the 1980s to today's nascent venture capital industry. The analysis leads to policy and managerial implications, as well as a research agenda for further studies in the Chinese context and across different venture financing systems.

Keywords: Venture capital; China; Innovation; New venture finance; Transition economy

1. Introduction

China's system for financing new ventures has emerged over the last two decades in the context of China's dramatic transition from central planning to more market-based coordination of economic activity. Because of its starting conditions – in particular, the legacy of inefficient central planning and socialist ideology – the results of this transformation seem particularly striking. The still-evolving system has already become an important institution supporting China's new technology-based ventures (Table 1). By 2001, 86,000 new technology-based ventures had been established and funded, employing 5.6 million and generating revenues of RMB 1.5 trillion (US$181 billion). This financing system has come to comprise a set of regulations and over 200 venture capital firms interacting with 130 publicly listed firms, 465 technology business incubators, and 53 high-tech zones, as well as the central bureaucracies and provincial and municipal governments.

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Table 1
Status and performance of elements of China's VC industry[a]

Technology-based new ventures[b]	
	Approximately 86,000 nationwide (8.3% increase yoy)
	Employ 5.6 million (14% increase yoy)
	Combined revenues of RMB 1.5 trillion (40% increase yoy)
	Reported profits of RMB 100 billion, remitted taxes of RMB 78 billion (39% increase yoy)
	Exported RMB 214 billion (US$26 billion; 64% increase yoy)
	Spent RMB 41 billion on R&D (5.7% decrease yoy)
	Main categories of ownership form: 7.3% SOEs, 16% collectives, 24% private/individual firms, 6% joint stock companies, 37% limited liability companies, 5.5% foreign-invested (from other countries, Hong Kong, Macau and Taiwan)
Venture capital firms	
	160 Domestic VC firms, 50 foreign VC firms
	No new VCFs founded since July 2001; several have gone bankrupt or inactive
Science and Technology Industrial Parks, High-tech zones	
	53 Nationwide
	Housing 20,800 high technology-based firms (primarily technology-based SMEs)
	Employ 2.51 million
	Combined revenues of RMB 921 billion
	Taxes and profits of RMB 106 billion
	Exports of RMB 153 billion (US$ 18.6 billion)
	Location of approximately half of the projects funded by the Torch Program
Incubators	
	465 Technology business incubators nationwide
	House 788 intermediary service agencies
	15,449 Tenant firms, employing 292,000, including:
	130,000 with Bachelor, Master or Ph.D. degrees
	4100 returnees from study abroad
	Combined sales income of RMB 42 billion
	3887 firms had "graduated" and moved out of the incubators
	32 of these listed on the stock market
Torch Program	
	Torch Program Projects
	Approximately 1000 projects selected each year
	Funded by bank loans or self-raised funds
	2870 National-level projects had sales of RMB 83 billion, taxes and profits of RMB 15 billion, and exports of RMB 16.5 billion (US$ 2 billion).
	Innovation fund for small technology-based firms
	2900 projects funded during 1999–2002
	RMB 2.3 billion disbursed (supplemented by RMB 22.5 billion from local governments, banks, VC, etc.)

Sources: Compiled from Zhang (2001), authors' interviews, GEM project (Jiang et al., 2002), and various published sources.
[a] As of the end of 2000, unless otherwise noted.
[b] Small and medium enterprises in which at least 30% of the employees are S&T personnel, and R&D expenditures represent at least 5% of sales.

This paper examines the antecedents and institutionalization process that has given rise to the current structure and dynamics of this venture capital system.[1] To structure our system-level analysis, we draw on evolutionary economics and institutional theory to propose a generalizable framework for comparing venture capital systems (Fig. 1). Comparative research on business systems (Whitley, 1990; Redding, 2001) and venture

[1] In this paper, we use the term "venture capital system" in a broader sense than simply a type of capital, namely, the system of actors and institutions that finances new ventures. In the Chinese context, high-tech ventures are the focus of this system.