China's Venture Capital System and Investment Decision-making

Dr. Wei Zhang (张帏)
School of Economics & Management, Tsinghua Univ.
Visiting Fellow, Stanford GSB

zhangw3@em.tsinghua.edu.cn
zhang_wei@gsb.stanford.edu

Stanford: Nov. 18st, 2004
VC industry in China: heating up

• 9 VC-backed firms from China IPO in NASDAQ and NYSE in the past 11 months.

• Impressive M&A in China: Joyo(Amazon), eachnet(eBay), 3721(Yahoo!)

• Carlyle Asia Venture Partners' $8m investment in online travel company Ctrip.com ballooned to $100m when the company went public in Dec. 2003. ($48.33/share, Nov.30, 2004; nearly 3 times of IPO price)

• IDGVC made 1,900% profit on its stake in online auction company EachNet when it was bought by eBay Inc. for $200m last year.

• More active VC investment, more international willing to join.
<table>
<thead>
<tr>
<th>Company</th>
<th>Stock code</th>
<th>IPO time</th>
<th>Core business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ctrip</td>
<td>CTRP</td>
<td>2003/12/09</td>
<td>Travel service</td>
</tr>
<tr>
<td>Linktone</td>
<td>LTON</td>
<td>2004/03/04</td>
<td>Wireless service</td>
</tr>
<tr>
<td>Tom Online</td>
<td>TOMO</td>
<td>2004/03/10</td>
<td>Wireless service</td>
</tr>
<tr>
<td>SMICS*</td>
<td>SMIC</td>
<td>2004/03/17</td>
<td>Chip manufacturing</td>
</tr>
<tr>
<td>Shanda</td>
<td>SNDA</td>
<td>2004/05/13</td>
<td>Networking Game</td>
</tr>
<tr>
<td>Kongzhong</td>
<td>KONG</td>
<td>2004/07/09</td>
<td>Wireless content and application</td>
</tr>
<tr>
<td>51job.com</td>
<td>JOBS</td>
<td>2004/09/28</td>
<td>Website of recruitment</td>
</tr>
<tr>
<td>Financial street</td>
<td>JRJC</td>
<td>2004/10/15</td>
<td>Financial information services</td>
</tr>
<tr>
<td>elong</td>
<td>LONG</td>
<td>2004/10/29</td>
<td>Online travel business</td>
</tr>
</tbody>
</table>

* IPO in NYSE and Hong Kong
Key topics

• What is the evolving structure and system of VC industry in China?
• What is the investment process and how do international VC firms make decisions when investing in China?
• Why have several VC firms outperformed others? Why lose money?
• What challenges lie ahead?
General framework of VC system

• Configuration of actors

• Rules and practices
  ✓ investment funds pooled
  ✓ investment targets identified
  ✓ funds invested and monitored
  ✓ returns appropriated

• Specific to China’s national context
Evolving structure and system of China VC

• Relatively recent phenomenon

• Emerging from decades of government-led technology policy.

• A still-transitioning business system.
China: Key events

• 1985: Central govt. notes that VC is/should be part of overall reforms of China’s S&T system. Est. 1st govt-backed VC firm.

• 1988: Torch Program to promote engineering and commercialization of S&T outputs.

• 1991: Central govt issues high-tech zone policies. Some VC firms started by local govts.


• 2003: Rules on Administration of Foreign-Invested Venture Capital Investment Enterprises implemented.

Antecedents: transition-era reforms and practices

• Chinese government:
  Science & Tech (S&T): critical part for searching economic development.

• VC in the Chinese context:
  Promoted (by government)
  ✓ not as a means to private gain
  ✓ but as a critical mechanism of linking S&T capabilities and
    – outputs
    – Economic and social development

• Institutionalization of China’s VC system:
  Result of preceding and on-going changes in China’s national innovation system and business system during the transition era.
The problem of centrally planned system: by late 1970s

• Inefficiencies and lower effectiveness of a centrally planned economy

• R&D system in China:
  ✓ a large number of organizations specialized in particular industries and in specific stages in the value chain.
  ✓ little or no horizontal linkages and information flows between these functionally specialized actors.
  ✓ Innovation was primarily initiated by central government ministries and bureaus, within the guidelines of national plans.
New venture support prior to VC system: 1980s to early 1990s

• Three primary institutional actors
  ✓ R&D institutes and universities:
    Primary role at start-up stage: original technology and seed capital.
  ✓ Banks:
    Primary source of financing: investment in spin-off projects under Torch Program.
  ✓ Technology zones:
    Incubator functions
How did this pre-institutionalized system work?

Benefit:
- Large number of new tech-ventures founded

Limitation:
- Too small of supply of initial stage capital
- Not providing legal, regulatory and other institutional support
  
  Lack of a legal definition and protection of ownership over a new venture’s assets: clearly inhibits the ability of actors to invest and channel funds to new ventures.

Central government recognized the limitation of current system by mid-1990s.
Institutionalization of VC system: from mid-1990s

- Perception change of VC by policymakers:
  From government funding to commercial activity to support the commercialization of new technology.

- Changes in government involvement in VC activities
  - Central government more focus on:
    - Policy of decentralization
    - Provide legitimacy to VC as well as private entrepreneurship
    - Create institutional environment conducive to investment in new ventures
  - Local governments:
    much more direct role in development of new ventures and supporting infrastructure, including in basic activities of the VC system.
US system

Venture Capital Firms

- Independent VC firm
- Corporate VC firm (CVC) (single or multiple corporate investors)
- Corporate and pension funds, etc.
- Domestic and foreign private investors
- Listed and cash-rich enterprises

Technology-based New Venture Firm

- Research Institutes
- Universities
- Organizational spin-offs
- Incubators
- Stock Market

Domestic and foreign private investors
- Corporate and pension funds, etc.
- Listed and cash-rich enterprises

Chinese system

**VC industry structure in U.S.**

**Supply drivers**
- Funds -of- funds
  - Pension funds
  - Foundations
  - Corporations
  - Education and innovation

**New Entrants**
- Investment banks
- Venture capital arms of foreign corporations

**Traditional VC industry rivalry**
- Generalist VC firms
- Specialist VC firms
- LBO/MBO firms

**Substitutes**
- Business angels
- Corporate M&A

**Demand drivers**
- Level of entrepreneurial activity
- Liquid capital markets (NASDAQ)

*Source: Vega, Chong and Zhang (2004)*
Market determinants of VC: a China perspective

Supply drivers
• Funds-of-funds
  • public companies
  • the government
  • foreign investor
  • Education and innovation

New Entrants
• Investment banks
• Development agencies
• VC arms of foreign corporations

Traditional VC industry rivalry
• Generalist VC firms
• University venture capital
• Government venture capital

Demand drivers
• Entrepreneurs seeking funding
• Government regulation
• Exit potential via trade sale and liquid capital markets

Substitutes
• Foreign Direct Investment
• Business angels
• Commercial loans

Source: Vega, Chong and Zhang (2004)
**Typical VC decision making process**

<table>
<thead>
<tr>
<th>Deal Origination</th>
<th>Deal Due Diligence</th>
<th>Deal Structure</th>
<th>Venture Management</th>
<th>Exit</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Initiated deal through business plan sent or referral</td>
<td>• Analysis based on business plan</td>
<td>• VC provides initial structure</td>
<td>• VC participates on the board</td>
<td>• Exit via IPO, trade sale, merger</td>
</tr>
<tr>
<td>• LOI/MOU signed for due diligence</td>
<td>• Negotiations</td>
<td>• Finalize structure</td>
<td>• Operationally active on “as needed” basis</td>
<td></td>
</tr>
<tr>
<td>• Company valuation</td>
<td>• Source co-investors where necessary — co-investors may perform own evaluation</td>
<td>• Source co-investors where necessary — co-investors may perform own evaluation</td>
<td>• Management contribution could include:</td>
<td></td>
</tr>
<tr>
<td>• Key risks developed and evaluated</td>
<td>• Money is funded</td>
<td>• Money is funded</td>
<td>• arrange financing</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• HRM</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• networking</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• later round investment</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• outside expertise</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Vega, Chong and Zhang (2004)*
More uncertainty and higher risk in China, while with great opportunities

- Higher information asymmetry:
  - Potentially higher moral hazard of entrepreneur

- Shortage of experienced entrepreneurs and investors:
  - Lack of experience of managing growing enterprise

- Quickly changing environment:
  - Technology application, market, deregulation

- Broad infrastructure:
  - Legal framework, the lack of liquid financial markets, et al.

**Venture capital infrastructure?**
More uncertainty and higher risk in China, while with great opportunities

VC investment in China:

• More depend on the entrepreneurs than USA

• Need better interests aligned

• Need good guide, rather than just directly control.
Foreign VC decision making process in China
(Preliminary findings based on the structured interview of 40 VC firms.)

- From a high level perspective, VCs in China follow the same procedure as in the USA

- Chinese market environment poses very different challenges:
  - Culture, business ethics, and business practices
  - Regulatory and socio-political frameworks
  - Access to and quality of information
  - The breadth/depth of the local networks and contacts
  - Exit paths / liquidity strategies

Source: Vega, Chong and Zhang (2004)
Deal sourcing and origination in China

Foreign VCs find it more difficult to source quality dealflow in China

<table>
<thead>
<tr>
<th>ISSUES AND CHALLENGES</th>
<th>STRATEGIES AND PROCESSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Network: New entrants in China – limited network of contacts</td>
<td>• Learning by doing: sequential investing.</td>
</tr>
<tr>
<td>• Reputation: not as strong as in home country &gt; inbound vs outbound deal flow</td>
<td>• Team: mix local and foreign professionals</td>
</tr>
<tr>
<td>• Risk: Many opportunities too early-stage</td>
<td>• Risk-sharing: partner with a local VC</td>
</tr>
<tr>
<td>• Deal size: VC investment sweet spot – hard to find big enough deals</td>
<td>• Network: Develop local network</td>
</tr>
<tr>
<td>• Insights: data and local market research not as good as back home</td>
<td>• Primary research: Do your own homework on market opportunities</td>
</tr>
<tr>
<td>• Trust: choosing intermediaries, agents, and service providers to work with</td>
<td>• Proactive targeting: Actively engage in outbound deal hunting.</td>
</tr>
<tr>
<td>Source: Vega, Chong and Zhang (2004)</td>
<td>• Government: More important in deal sourcing than in the West, e.g. SOEs</td>
</tr>
</tbody>
</table>
### ISSUES AND CHALLENGES

- **People:** Management team risk
- **Imperfect information:** Market potential difficult to quantify, no transparency
- **Third party research:** Consultant research output not that reliable / in-depth
- **Valuation:** Existing asset valuation difficult
- [...]  

### STRATEGIES AND PROCESSES

- **Network:** Know the people in the target industry. Check the management teams.
- **In-house due diligence:**
  - Do your own homework
  - Do not rely on desktop-based DD
  - Be thorough, triangulate, be rigorous
- **Be exhaustive:** speak to clients, suppliers, colleagues, family, friends
- **Share risk:**
  - Work/partner with a local VC partner
  - Co-invest to tap into local expertise

Source: Vega, Chong and Zhang (2004)
## Deal structuring in China

Protecting shareholder interests without a strong legal enforcement regime

<table>
<thead>
<tr>
<th>ISSUES AND CHALLENGES</th>
<th>STRATEGIES AND PROCESSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Legal: Cannot rely on the legal enforcement mechanism</td>
<td>• Align interests: Give management enough equity to remain interested and committed</td>
</tr>
<tr>
<td>• Valuation:</td>
<td>• Lock-ins and deterrents:</td>
</tr>
<tr>
<td>– Lack of public comparables</td>
<td>– capital on tap</td>
</tr>
<tr>
<td>– NPV/DCF not that reliable</td>
<td>– technology offshore</td>
</tr>
<tr>
<td>• Control:</td>
<td>– foreign domiciling and legal jurisdiction</td>
</tr>
<tr>
<td>– Control capital and capex</td>
<td>– performance based rewards/penalties</td>
</tr>
<tr>
<td>– Shareholder rights / veto rights</td>
<td>– strong guanxi / reputational threats</td>
</tr>
<tr>
<td>– Liquidation preference</td>
<td>– Maintain leverage post-investment</td>
</tr>
<tr>
<td>– Maintain leverage post-investment</td>
<td></td>
</tr>
</tbody>
</table>

Source: Vega, Chong and Zhang (2004)
Managing the investment portfolio in China

Adding value and exercising control requires hands-on involvement

<table>
<thead>
<tr>
<th>ISSUES AND CHALLENGES</th>
<th>STRATEGIES AND PROCESSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Value add: How to help the portfolio company?</td>
<td>• Executional value add: Strong emphasis on doing not monitoring. Introduce partners, customers, professionalism</td>
</tr>
<tr>
<td>• Dispute resolution: How to manage disagreements with management?</td>
<td>• Active monitoring: Be there, be visible</td>
</tr>
<tr>
<td>• Shareholder control: How to exercise influence and veto rights</td>
<td>• Incentive: keep interests aligned</td>
</tr>
<tr>
<td></td>
<td>• Operational leverage:</td>
</tr>
<tr>
<td></td>
<td>– capital offshore / release in tranches</td>
</tr>
<tr>
<td></td>
<td>– control technology transfer/access</td>
</tr>
<tr>
<td></td>
<td>– legally enforce in foreign jurisdictions</td>
</tr>
<tr>
<td></td>
<td>– equity / salary penalties</td>
</tr>
<tr>
<td></td>
<td>– Reputational leverage</td>
</tr>
</tbody>
</table>

Source: Vega, Chong and Zhang (2004)
Investment exit strategies in China

The path to investment exit in China requires flexibility and patience

<table>
<thead>
<tr>
<th>ISSUES AND CHALLENGES</th>
<th>STRATEGIES AND PROCESSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Investment exit unclear:</td>
<td>• Trade sale: preferred option for many, but one must think of potential buyers early on</td>
</tr>
<tr>
<td>– IPO common exit route in the West but not that easy in China</td>
<td>• Foreign listing:</td>
</tr>
<tr>
<td>– Listing procedure a long and difficult process</td>
<td>– NASDAQ</td>
</tr>
<tr>
<td>– Lack of Liquidity, transparency, professionalism, valuation issues</td>
<td>– GEMS – remains to be seen if viable</td>
</tr>
<tr>
<td>– No secondary stock market</td>
<td>– Buy into a HK listed company, backdoor IPO</td>
</tr>
<tr>
<td>– No convertability on the capital account.</td>
<td>– Australia and Singapore listing</td>
</tr>
<tr>
<td>Source: Vega, Chong and Zhang (2004)</td>
<td>• Deregulation: Listing procedures will improve</td>
</tr>
<tr>
<td></td>
<td>• Professionalization: Foreign-trained experts now entering the managing stock exchanges</td>
</tr>
<tr>
<td></td>
<td>• MBO: Conditions improving but management often cannot raise capital</td>
</tr>
<tr>
<td></td>
<td>• Patience: Extended investment horizons</td>
</tr>
</tbody>
</table>
Why several VC firms outperformed others?

**Case 1: IDGVC**

- Founded in 1992
- Mainly investing in China high-tech industries
  - More than 100 investees.
  - Near $300M total investment.
- Great success in China
  - IPO in Nasdaq:
    - Sohu, CTRP, JRJC
  - IPO in Hong Kong GEM:
    - Kingdee, Superdata, hc360, Wu Mart
  - Impressive M&A:
    - eachnet (eBay), 3721 (Yahoo!), Guangzhou Bonson (AsiaInfo)
Why several VC firms outperformed others?

Why IDGVC succeed?

- IDG’s long experience in China’s emerging market
- Good management team
  - Local knowledge and international experience
- Effective investment criteria
  - Emphasizing ownership of management team, et al.
  - IP Strategy
  - Other issues specific related to China market: effect protection of distribution channels
- Well balance between the guiding function and giving entrepreneurs enough operation freedom
- Persistence
Why several VC firms outperformed others?

Case2: Intel Capital

• Start VC investment in China from about 1998
• Mainly investing in IT related industries
  – More than 50 investees.
• “Great success in China” (Claude Leglise, VP of Intel Capital)
  – IPO in Nasdaq:
    \[\text{UTStarcom, AsiaInfo, Sohu}\]
Why several VC firms outperformed others?

Why Intel Capital succeed?

- Intel’s industrial experience in China’s emerging market
- Good management team
  - Mixed team of industrial expert and financial expert, Combining local knowledge and international experience.
- Effective investment criteria
  - Combine strategic objective and financial objective
- Complementary of Intel’s market development, China’s high growth PC and related industry and manufacturing advantage.
- Value-added to the venture through management guiding, industrial network and channels providing, while not too much involving the daily operation.
VC model with “Chinese characteristics”

• More emphasis on technology application, not invention.

• Huge and growing local market
  – More focus on local market than global markets (but variation by industry and firm)
  – Distribution channels becoming more valuable
  – More cooperation between local and foreign entrepreneurs and their firms.

• Undertake sustainable projects
  – Emphasis on time-to-market, time-to-revenue, time-to-profit.
  – Combination of experienced founders and cooperative management teams increasingly important.

• Even more collaboration within Greater China and between Silicon Valley and China.
Challenges ahead: overall challenges

• Exit through IPO in China remains difficult, even after SME board opened in Shenzhen (May 04).
• Domestic VC firms need to improve skills and learn from (but not necessarily imitate) foreign VC firms to compete with foreign VCs.
• Need to shift from “high-tech” to “high-growth” (that’s where the bulk of opportunities are, and the foreign VCs know that).
• Other potential issues: IP, legal codes (appropriateness, transparency, enforcement)…
Challenges by stage

• Difficult for VCs to raise funds: improved Situation
  – Govt restrictions
  – Lack successful track record (esp. DVCs)

• Difficult to find promising projects
  – Small ventures: hard to get committed cash flow
  – Larger deals
    • If SOE, govt worried about losing state-owned assets (but getting better…)
    • If private companies, overestimated valuation
(Challenges, cont.)

• Difficulty in management after investment
  – Professional managers scarce.
  – Difficult to replace founder who is unfit for growing the venture.

• Difficult to exit
  – High barriers to listing (so far).
  – Low trading volume → low liquidity → not attractive to investors.
  – Undeveloped M&A market in China.
China’s VC industry has just passed its starting point.

Chang SUN, 2002
Managing Director of Warburg Pincus Asia,
Founder and First Chairman of CVCA

China’s VC industry is entering the early mature stage, since there have been good cases and successful VC firm samples now.

Wei ZHANG, 2004
Main references

