Sources of Legitimacy for New Venture Investors

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Center for Venture Research

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Oregon State

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Information asymmetry
Angels – entrepreneurs
lemons discount – expected bias

What conveys legitimacy to angels
Angel investment criteria
Anita Roddich 1976
The Body Shop
Ian McGlinn

Jeff Bezos 1994
Amazon.com
12 angels $100,000 each
Larry Page and Sergey Brin 1998
Google
maxed out credit cards
Andy Bechtolsheim (co-founder – Sun Microsystems) $100,000
Angels contribute to legitimacy (investing, screening) influenced by legitimacy (prior investors, VF selection)
The Supply of Private Equity

Angels
Venture Capitalists
Business Angels

- 2011\(_{Q1Q2}\): 124,900 angels invest $8.9 billion in 26,300 ventures
- 2010: $20.1 billion in 61,900 ventures
- 2009: $17.6 billion in 57,225 ventures
- 2008: $19.2 billion in 55,480 ventures
- 2007: $26.0 billion in 57,120 ventures
- 2006: $25.6 billion in 51,000 ventures
- 2005: $23.1 billion in 49,500 ventures
- 2004: $22.5 billion in 48,000 ventures
- 2003: $18.1 billion in 42,000 ventures
- 2002: $15.7 billion in 36,000 ventures
## Recent Trends

<table>
<thead>
<tr>
<th>2008 vs. 2007</th>
<th>2009 vs. 2008</th>
<th>2010 vs. 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$ -26%</td>
<td>$ -8.3%</td>
<td>$+14%</td>
</tr>
<tr>
<td>deals -2.9%</td>
<td>deals +3.1%</td>
<td>deals +8.2%</td>
</tr>
<tr>
<td>investors +1.0%</td>
<td>investors -0.4%</td>
<td>investors +2.3%</td>
</tr>
<tr>
<td>avg. deal size -24%</td>
<td>avg. deal size -11%</td>
<td>avg. deal size +5.4%</td>
</tr>
<tr>
<td>investors/deal (6.0)</td>
<td>investors/deal (4.5)</td>
<td>investors/deal (4.5)</td>
</tr>
</tbody>
</table>
Recent Trends

2010Q1Q2 vs. 2011Q1Q2:

- $ +4.7%
- deals +4.4%
- investors 0%
- avg. deal size 0%
- investors/deal (4.5)
<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Deals</th>
<th>per Deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>$106.6 billion</td>
<td>8,221</td>
<td>$13.0 million</td>
</tr>
<tr>
<td>2001</td>
<td>$41.3 billion</td>
<td>4,711</td>
<td>$8.8 million</td>
</tr>
<tr>
<td>2002</td>
<td>$21.2 billion</td>
<td>3,011</td>
<td>$7.0 million</td>
</tr>
<tr>
<td>2003</td>
<td>$18.2 billion</td>
<td>2,715</td>
<td>$6.7 million</td>
</tr>
<tr>
<td>2004</td>
<td>$21.6 billion</td>
<td>2,983</td>
<td>$7.2 million</td>
</tr>
<tr>
<td>2005</td>
<td>$22.1 billion</td>
<td>3,008</td>
<td>$7.4 million</td>
</tr>
<tr>
<td>2006</td>
<td>$25.5 billion</td>
<td>3,416</td>
<td>$7.5 million</td>
</tr>
<tr>
<td>2007</td>
<td>$30.7 billion</td>
<td>3,918</td>
<td>$7.8 million</td>
</tr>
<tr>
<td>2008</td>
<td>$28.3 billion</td>
<td>3,808</td>
<td>$7.4 million</td>
</tr>
<tr>
<td>2009</td>
<td>$17.7 billion</td>
<td>2,795</td>
<td>$6.3 million</td>
</tr>
<tr>
<td>2010</td>
<td>$21.8 billion</td>
<td>3,277</td>
<td>$6.9 million</td>
</tr>
<tr>
<td>2011 Q1Q2</td>
<td>$13.8 billion</td>
<td>1,780</td>
<td>$7.8 million</td>
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</tbody>
</table>
Trends in Private Equity

Movement of capital stages

The Gap dilemma
# The Truth About Early Stage

## Seed and Start-up financing – VC

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
<th>Percentage</th>
<th>Deals</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>$3.2 b</td>
<td>(3.0%)</td>
<td>663</td>
<td>(8.0%)</td>
</tr>
<tr>
<td>2001</td>
<td>$798 m</td>
<td>(2.0%)</td>
<td>249</td>
<td>(5.1%)</td>
</tr>
<tr>
<td>2002</td>
<td>$303 m</td>
<td>(1.4%)</td>
<td>148</td>
<td>(4.9%)</td>
</tr>
<tr>
<td>2003</td>
<td>$354 m</td>
<td>(2.0%)</td>
<td>166</td>
<td>(6.0%)</td>
</tr>
<tr>
<td>2004</td>
<td>$412 m</td>
<td>(1.9%)</td>
<td>190</td>
<td>(6.3%)</td>
</tr>
<tr>
<td>2005</td>
<td>$767 m</td>
<td>(3.5%)</td>
<td>184</td>
<td>(6.1%)</td>
</tr>
<tr>
<td>2006</td>
<td>$1.2 b</td>
<td>(4.7%)</td>
<td>312</td>
<td>(9.1%)</td>
</tr>
<tr>
<td>2007</td>
<td>$1.2 b</td>
<td>(3.9%)</td>
<td>415</td>
<td>(10.6%)</td>
</tr>
<tr>
<td>2008</td>
<td>$1.5 b</td>
<td>(5.3%)</td>
<td>440</td>
<td>(11.6%)</td>
</tr>
<tr>
<td>2009</td>
<td>$1.7 b</td>
<td>(9.6%)</td>
<td>318</td>
<td>(11.4%)</td>
</tr>
<tr>
<td>2010</td>
<td>$1.7 b</td>
<td>(7.8%)</td>
<td>363</td>
<td>(11.1%)</td>
</tr>
<tr>
<td>2011 Q1-Q2</td>
<td>$0.5 b</td>
<td>(3.6%)</td>
<td>191</td>
<td>(10.7%)</td>
</tr>
</tbody>
</table>
# The Truth About Early Stage First Sequence investing – VC

<table>
<thead>
<tr>
<th>Year</th>
<th>Companies</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>3,364</td>
<td>41%</td>
</tr>
<tr>
<td>2001</td>
<td>1,178</td>
<td>25%</td>
</tr>
<tr>
<td>2002</td>
<td>756</td>
<td>25%</td>
</tr>
<tr>
<td>2003</td>
<td>624</td>
<td>23%</td>
</tr>
<tr>
<td>2004</td>
<td>796</td>
<td>28%</td>
</tr>
<tr>
<td>2005</td>
<td>922</td>
<td>31%</td>
</tr>
<tr>
<td>2006</td>
<td>1,093</td>
<td>32%</td>
</tr>
<tr>
<td>2007</td>
<td>1,267</td>
<td>33%</td>
</tr>
<tr>
<td>2008</td>
<td>1,171</td>
<td>31%</td>
</tr>
<tr>
<td>2009</td>
<td>725</td>
<td>26%</td>
</tr>
<tr>
<td>2010</td>
<td>999</td>
<td>30%</td>
</tr>
<tr>
<td>2011 Q1Q2</td>
<td>564</td>
<td>32%</td>
</tr>
</tbody>
</table>
Trends in Private Equity

Movement of capital stages
The Gap dilemma
Primary and Secondary Gap

I can't believe how much money it takes to fill that thing!

Center for Venture Research - University of New Hampshire
### Equity Capital for Entrepreneurs

<table>
<thead>
<tr>
<th>Stage</th>
<th>Pre Seed</th>
<th>Seed/ Start-Up</th>
<th>Early</th>
<th>Later</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>FDRS</td>
<td>FFF</td>
<td>Angels</td>
<td>Venture Funds</td>
</tr>
<tr>
<td>Demand</td>
<td>$25K</td>
<td>$100K</td>
<td>$500K</td>
<td>$2,000K</td>
</tr>
</tbody>
</table>

**Information/Funding Gap**

**Capital Gap**
# The Gap Dilemma

**2011 Q1Q2**

39% angel : seed and start-up  
60% angel : post seed and start-up

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Seed/start-up</td>
<td>31%</td>
<td>35%</td>
<td>45%</td>
<td>39%</td>
<td>46%</td>
<td>55%</td>
<td>43%</td>
<td>52%</td>
<td>50%</td>
</tr>
<tr>
<td>post seed/start-up</td>
<td>67%</td>
<td>62%</td>
<td>40%</td>
<td>35%</td>
<td>40%</td>
<td>43%</td>
<td>52%</td>
<td>35%</td>
<td>33%</td>
</tr>
</tbody>
</table>
What conveys legitimacy to angels
Angel investment criteria

Context for legitimacy
Define legitimacy
Normative Legitimacy

venture’s associations with appropriate norms and values from external forces, earned values

Examples
sales, suppliers,
Cognitive Legitimacy

adopt desirable practices from internal forces

Examples
organization structure, experience to know and implement practices
Industry Legitimacy

venture’s industry external forces

examples mortgage lenders 07-08 damaged reputation on line retailing (.com) enhanced reputation
Data

2008 and 2009 forum

Application material
Screening score
  mgt, product, market, deal terms, overall
6 month follow-up survey
215 applications

95 invited to attend VF
120 rejected
Total: 176 usable firms

Phone survey 72 firms
(41% response)
2 models

Dependent variable: Screening score

post VF funding (0,1)
Normative Legitimacy
(external forces, earned values)

previous capital (amount)
internal investors (I)
external investors (I)
venture stage
(pre product, product no sales, 12 month revenue)
Normative Legitimacy

Employees
Venture age
Advisors (0,1)
Cognitive Legitimacy
(internal forces)

Submitted documents (#)
(BP, financials, exec summary, video)

Top management team (TMT):
TMT industry experience (I)
TMT experience on a previous TMT (I)
TMT education in related field (I)
Industry Legitimacy

VC industry
(deals and dollars – 1995 - 2009)

Example: software, 25% of total deals, all software firms assigned.
Descriptive Results

Invested capital: $267,000
  internal  70%
  external  30%

Most have:
  revenues, 1-10 employees, 2-3 years old

Advisors: 84%
Descriptive Results

TMT industry: 73%
previous TMT experience: 21%
TMT education: 20%

most in VC industries
Correlation

Ind vs Dep1, Dep2 (both significant)

Previous capital
External investors
TMT industry experience
Model 1 dep var. screening score

Normative legitimacy
external investors
venture stage
age of firm
advisors
Model 1 dep var. screening score

Cognitive Legitimacy
TMT industry experience
TMT education in related field

Industry legitimacy
not significant
Model 2 dep var.
received external equity funding

Normative legitimacy
employees
previous capital
venture age
Model 2 dep var.
received external equity funding

Cognitive Legitimacy
TMT industry experience
TMT education in related field
submitted documents

Industry legitimacy
VC industry (negative)
Conclusions

Entrepreneurs benefit from:
- TMT industry experience
- TMT education
- Strong external investors
- Product with revenue
- Advisors
- Previous capital (amount)
- Angel invest industries where VC do not
Future Research

Additional forums
VF format
Type of VF vs. economic geography
International comparisons
Attribution theory
“I know of nothing so pleasant to the mind, as the discovery of anything which is at once new and valuable.”

—Abraham Lincoln