Financing the Emerging Firm

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What do we mean by “emerging firm”?

Attempts by individuals to start a new venture.

- Expect to be owners or part owners of a new firm.
- Have been active in trying to start a new firm in the past 12 months.
- No positive cash flow covering expenses for more than 3 of those months.

Why emerging firm financing?

- This study explores financing choices made by entrepreneurs

- Despite a wealth of studies on corporate and SME financing, little is known about resource acquisition at the emerging venture stage.

- Firm emergence is a unique phenomenon (Ang, 1991; 1992).

Theories

- Capital structure (Titman and Wessels, 1988)
  - Firms choose funding that minimize costs and maximize the benefits associated with debt and equity

- Agency conflicts (Jensen and Meckling, 1976)
  - Shareholders as residual claimants have an incentive to increase financial risks. Debt holders impose monitoring policies on firm.

- Pecking Order Theory (Myers, 1984; Myers and Majluf, 1984)
  - Firms do not aim for target debt ratio. Rather, capital structure emerges as the firm selects funding that minimizes the cost of capital

Prior Research

- Firms likely to use capital structure for strategic purposes or to maximize shareholder returns (Fama and French, 2002; Shyam-Sunder and Myers, 1999)
- Small firms face different agency and information asymmetry challenges (Ang, 1991)
- Bootstrapping (Winborg and Landstrom, 2000)
- Outside investors of small firms pay close attention to entrepreneur's creditworthiness and reputation (Ou and Haynes, 2006)
- Individual characteristics and firm characteristics as determinants of start-up financing (Cassar, 2004)

Hypotheses

- H_1: Firm size and external financing (+)
- H_2: Incorporation and external financing (+)
- H_3: Growth intentions and external funding (+)
- H_4: Asset intensive industry and external $ (+)
- H_5: Financial planning and external $ (+)
- H_6: Legal registration and external $ (+)
- H_7: Individual characteristics will influence whether external sources of financing are acquired

Sample

- PSED II
  - Representative sample of 1,214 individuals attempting to start a business in the United States
  - 4 Waves of data (2005 – 2009)
  - Weighted sample

Dependent Variable

	Personal Sources	External Sources
Q - Personal savings		-
R - Personal loans		-
R - Personal and team equity		-
R - Team member loans		-
Q - Credit card		-
R - Credit card		-
Q - 2nd mortgage or car loan		-
Q - Family & relatives	-	
Q - Friends, employers, & work colleagues	-	
R - Loans from employees	-	
Q - Bank or other financial institution	-	
R - Bank loan	-	
R - Bank line of credit or working capital	-	
R - SBA guaranteed bank loans	-	
R - Asset backed debt (e.g. land, equipment)	-	
R - Leases on property and equipment	-	
R - Supplier credit	-	
R - Venture capital	-	
R - Government agencies (not SBA)	-	
R - Loans from other individuals	-	
* R - Spouses, family, other kin	-	-
* Q - Other	-	-
* R - Other	-	-

Q = Before registered as a legal entity
R = After registered as a legal entity
* = Not used in analysis

Independent Variables

- Firm size
  - log expected revenue after first year of operations
- Legal form
  - 0 = non-incorporated
  - 1 = incorporated
- Growth intentions
  - 0 = “want a size to manage by myself”
  - 1 = “want to be as large as possible”
- Industry
  - 0 = service oriented firms
  - 1 = asset intensive industry
- Financial projections
  - 0 = have not prepared projections
  - 1 = has prepared projections (cash flow statements, break even analysis, etc)
- Registration of business
  - 0 = not legally registered
  - 1 = registered

Independent Variables (cont.)

- Entrepreneur Characteristics
  - Gender; 0=female; 1=male
  - Race; 0=non minorities; 1=minority
  - Education; high school, some college, bachelor’s, post graduate
  - Net Worth; log of reported net worth
  - Work experience; log of number of years experience in same industry as the venture

Model

- Binary Logistic Regression
  – Effects of firm and entrepreneur characteristics on choice to use either personal or external sources of financing

- OLS Regression
  – Effects of firm and entrepreneur characteristics on amount of financing acquired

Frequencies for use of internal and external sources of funding

	Personal Sources	**External Sources**	**Did Not Finance**	**External Financing Only**
Yes	1,017 (83.8%)	386 (31.8%)	175 (14.4%)	22 (1.8%)
No	197 (16.2%)	828 (68.2%)	1,039 (85.6%)	1,192 (98.2%)
Median amount	$6,500	$8,250	$0.00	$5,250
N	1,214	1,214	1,214	1,214

Sources of Start-up Financing in the United States, 2005-2008

Personal contributions	82.5%
Team contributions	2.9%
Family	16.6%
Friends & work colleagues	6.0%
Credit card	14.3%
2^{nd} mortgage or car loan	5.3%
Bank loans / SBA Guaranteed Loans	14.8%
Asset backed debt	4.7%
Leases on property and equipment	2.6%
Credit from suppliers	3.1%
Venture capital	0.3%
Government agencies	0.1%
Other individuals or institutions	3.0%

Median Amount of Start-up Financing Acquired (by source)

Personal contributions	$ 5,500
Team contributions	13,000
Family	4,000
Friends & work colleagues	2,000
Credit card	4,000
2nd mortgage or car loan	19,000
Bank loans / SBA Guaranteed Loans	20,000
Asset backed debt	30,000
Leases on property and equipment	21,500
Credit from suppliers	6,000
Venture capital	--
Government agencies	--
Other individuals or institutions	5,000

Total Financing (Proportion of Total) Across Sample

Personal contributions	$ 116,282,563	(57.34%)
Team contributions	17,626,325	(8.69)
Family	5,001,329	(2.47)
Friends & work colleagues	1,996,219	(0.98)
Credit card	1,851,200	(0.91)
2nd mortgage or car loan	8,222,305	(4.05)
Bank loans / SBA Guaranteed Loans	24,477,648	(12.07)
Asset backed debt	23,740,000	(11.71)
Leases on property and equipment	1,787,212	(0.88)
Credit from suppliers	1,033,600	(0.51)
Venture capital	755,000	(.38)
Government agencies	2,000	(.00)
Other individuals or institutions	1,847,125	(.91)

Results

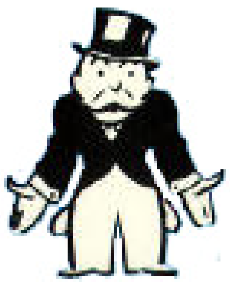
Hypotheses	Supported?
H_1 Expected Size of Firm	Yes
H_2 Legal form	Yes
H_3 Growth Intent	No
H_4 Industry	No
H_5 Planning	No (planning = 1.5x more likely to acquire external funds)
H_6 Registration	Yes
H_{7a} Sex	No (Men 2x as likely women to select external funding)
H_{7b} Race	Yes (Hispanics ½ as likely to acquire external; Blacks 3x more likely to use personal
H_{7c} Education	Yes
H_{7d} Net Worth	Yes
H_{7e} Work Exp	No

What percentage of entrepreneurs said they quit due to lack of money?

Of those entrepreneurs who quit in our sample…

25%

said they did so for lack of funding or cash flow problems



Other reasons for dropping out

"Time"

"Divorce"

"Sickness"

"Got a job"

"Personal Circumstances"

"Husband stung by bee and almost died"

Summary

- 57% of all nascent venture financing in the U.S. comes from personal contributions (median amount $5,500)
- 3.5% of all nascent venture financing comes from “Family and Friends”
- 12.7% of all nascent venture financing comes from bank loans, lines of credit, working capital loans, SBA guaranteed loans
- 11.71% of all nascent venture financing comes from asset backed debt
- 14.4% of nascent entrepreneurs used no money at all to finance their businesses

Summary

External funding more likely to be acquired by:

- firms expected to become large firms (size)
- incorporated startups
- legally registered startups
- individuals with high net worth and education

Future Research

“No Money” startups

“Outliers” -- the VC backed firms

Questions?