

Risk mitigation in Microfinance: The need for microequity

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Risks in Microfinance

Financial Risks	Operational Risks	Strategic Risks
Credit Risks <ul style="list-style-type: none"> ● Transaction ● Portfolio ● Product Development ● Interest Rates 	Transaction Risks <ul style="list-style-type: none"> ● Human Capacity ● Information Technology ● Back Office Operations 	Governance Risks <ul style="list-style-type: none"> ● Ineffective Oversight ● Corporate Governance ● Management Quality ● Mission Drift ● Strategy ● Ownership
Liquidity Risks <ul style="list-style-type: none"> ● Profitability ● Liquidity ● Lack of Funding ● Excess Funding 	Fraud / Integrity Risks <ul style="list-style-type: none"> ● Staff perpetrated fraud 	Reputation Risks <ul style="list-style-type: none"> ● Undeliverable Social Expectations ● Transparency
Market Risks <ul style="list-style-type: none"> ● Interest Rate ● Foreign Exchange ● Investment Portfolio 	Legal & Compliance Risks <ul style="list-style-type: none"> ● Inappropriate Regulation 	External Business Risks <ul style="list-style-type: none"> ● Competition ● Macroeconomic Trends ● Political Interference

Most research in microfinance focuses on credit risk

Risk	Mitigation Recommendation	Source
Credit risk	Peer monitoring, group pressure, and social ties reduce delinquency	(Al-Azzam et al., 2011 ; Armendàriz et al., 2010 ; Sharma et al., 1997)
Credit risk	Frequent repayments	(Armendàriz et al., 2010 ; Vogelgesang, 2003)
Credit risk	Public repayments	(Armendàriz et al., 2010)
Credit risk	Choose more religious borrowers	(Al-Azzam et al., 2011)
Credit risk	Provide loans for productive purposes	(Vogelgesang, 2003)
Credit risk	Go to rural areas (better group cohesion)	(Ahlin et al., 2011)
Credit risk	Disband older groups (as group age increases, repayment decreases)	(Godquin, 2004)
Credit risk	Dynamic incentives (people who repay should be able to get new loans), long term association	(Armendàriz et al., 2010 ; Constantinou et al., 2011 ; Patten et al., 2001 ; Sharma et al., 1997)
Credit risk	Ensure that first repayments are not late, threaten to stop lending	(Armendàriz et al., 2010 ; Vogelgesang, 2003)
Credit risk	Do not increase loan sizes without appropriate screening	(Godquin, 2004 ; Sharma et al., 1997)
Credit risk	The provision of nonfinancial services (access to health and education) has a positive impact on repayment performance	(Godquin, 2004 ; Sharma et al., 1997)
Credit risk	need for credit bureau	(Constantinou et al., 2011 ; McIntosh et al., 2005)
Credit risk	Better information systems based on latest technologies	(Constantinou et al., 2011 ; Khan, 2011 ; Quadri et al., 2011)
Credit risk	Loan products should be tailored to client's cash flow	(Patten et al., 2001)
Credit risk	Rescheduling of delinquent loans where the issues motivating delinquency could be resolved	(Constantinou et al., 2011)

Khan & Ashta (2013 forthcoming)

Other risks are less researched

Risk	Mitigation Recommendation	Source
Product risk	Great price differentials associated with risk	(Constantinou et al., 2011)
Liquidity risk	Offer savings products	(Constantinou et al., 2011 ; Patten et al., 2001 ; Paxton et al., 2011)
Market risk	MFIs should lend to entrepreneurs in domestic demand based industries	(Patten et al., 2001)
Portfolio risk	Diversify activity sectors within groups	(Sharma et al., 1997)
Market risk	MFI activity should be into poor, unserved areas or rural areas, even richer customers, especially in saturated markets	(McIntosh et al., 2005 ; Patten et al., 2001 ; Vogelgesang, 2003)
Portfolio risk	Diversify loan products	(Constantinou et al., 2011)
Transaction risk	Better educated staff, more training	(Constantinou et al., 2011)
Fraud	Refocus incentives on collections	(Constantinou et al., 2011)
Legal risk	Well thought out regulation reduces risk	(Vogelgesang, 2003)
Reputation risk	Have to collect, even reschedule to avoid contagion	(Vogelgesang, 2003)
External Business Risk	Go to countries which are not too poor and not too rich	(Ahlin et al., 2011)
External Business Risk	Governments should develop a deeper financial sector	(Ahlin et al., 2011)
External Business Risk	Governments could increase telecommunication access for borrowers	(Al-Azzam et al., 2011)
External Business Risk	Financially self-sufficient MFIs should co-exist with their subsidized counterparts, provided that these subsidies are carefully restricted to the poorest borrowers.	(McIntosh et al., 2005)

In the top three of Bangladesh

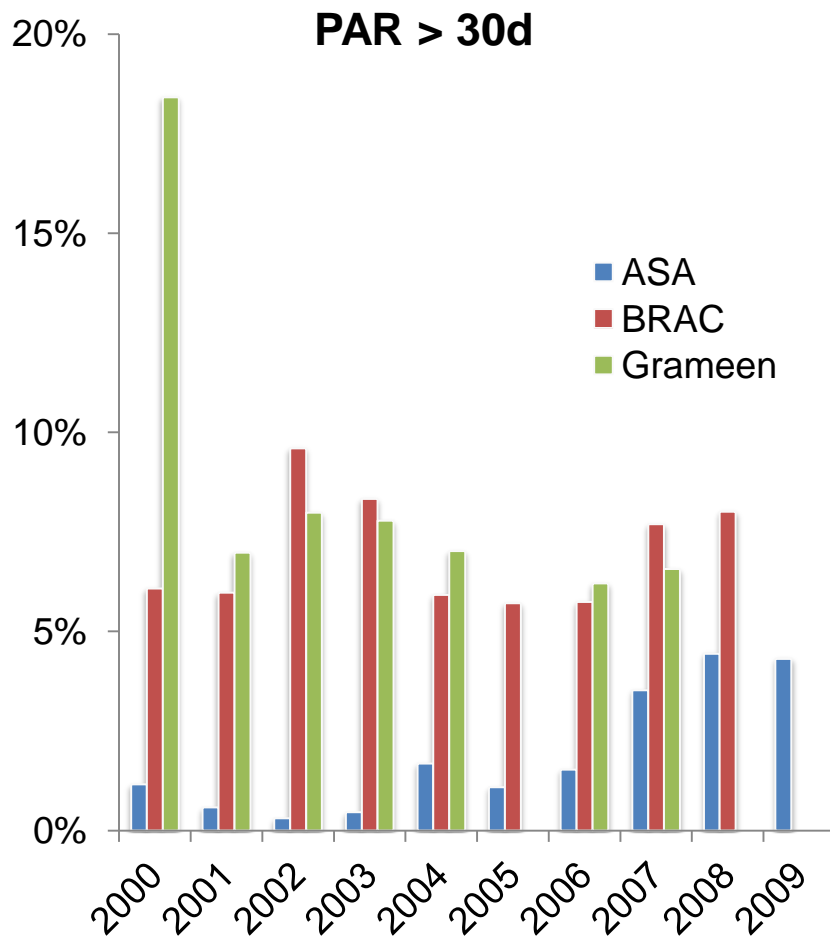


Figure 3: Evolution of PAR > 30d for the top three MFIs in Bangladesh (Source: MIX Market)

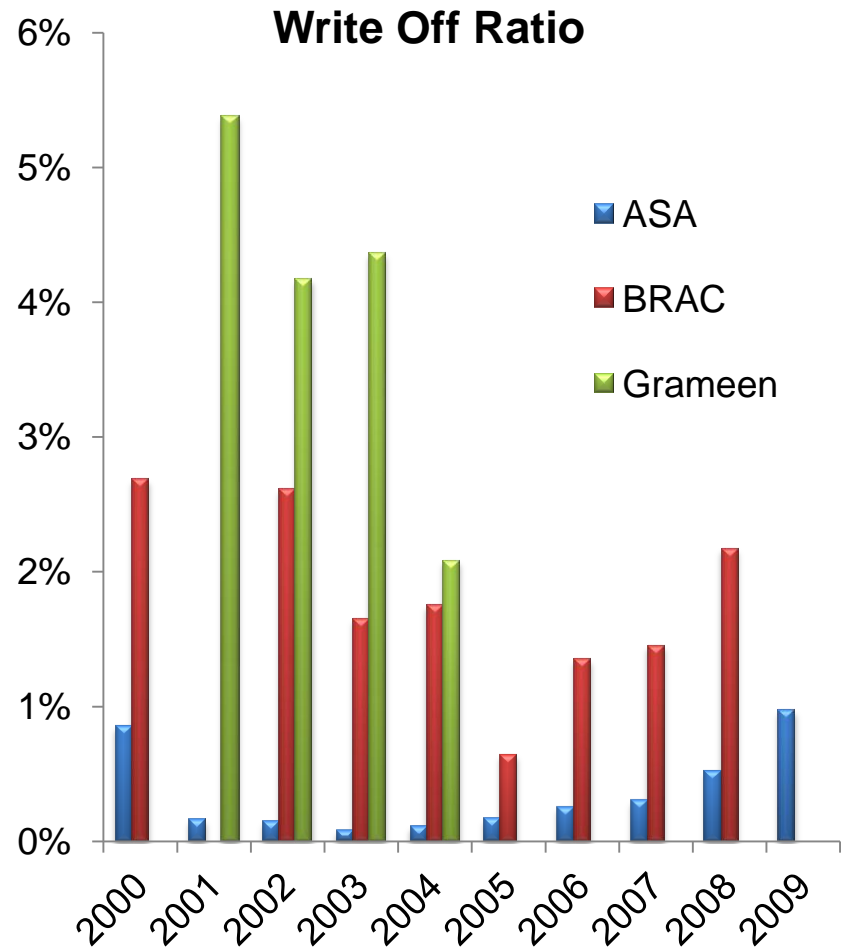


Figure 4: Write Off Ratios (WoR) for the top three MFIs in Bangladesh (Source: MIX Market)

Lessons from ASA in risk mitigation

Financial Risks	Operational Risks	Strategic Risks
Credit Risks <ul style="list-style-type: none"> • Engaging in group lending • Building a strong relationship with clients • Verifying each and every borrower • Standardizing products • Regular reporting of key results 	Transaction Risks <ul style="list-style-type: none"> • Collecting in group meetings • Conducting periodic review of client's passbooks • Computerized record keeping 	Governance Risks <ul style="list-style-type: none"> • Deputing experience staff members to run its overseas operations • Ensuring a client service focus • Fostering close relationships with clients and by earning their trust
Liquidity Risks <ul style="list-style-type: none"> • Standardizing products • Establishing strict repayment timelines • Anticipating savings withdrawals • Preparing daily fund plans : • Limiting branches overnight cash holding 	Fraud / Integrity Risks <ul style="list-style-type: none"> • 'Rotating' loan officers every six months • Disbursing loans only from the branch office • Peer based cross checking • Cashbook duty rotated • Checkbooks are kept with non-signatories 	Reputation Risks <ul style="list-style-type: none"> • Expanding the board of mature entities to include persons knowledgeable of local markets
Market Risks <ul style="list-style-type: none"> • Continuously market surveillance • Local currency borrowing to minimize currency exposure 	Legal & Compliance Risks <ul style="list-style-type: none"> • Internal and external audits 	External Business Risks <ul style="list-style-type: none"> • Keeping track of the 'macro view' in each operating country: including economic, legal, political, regulatory, fiscal, etc.

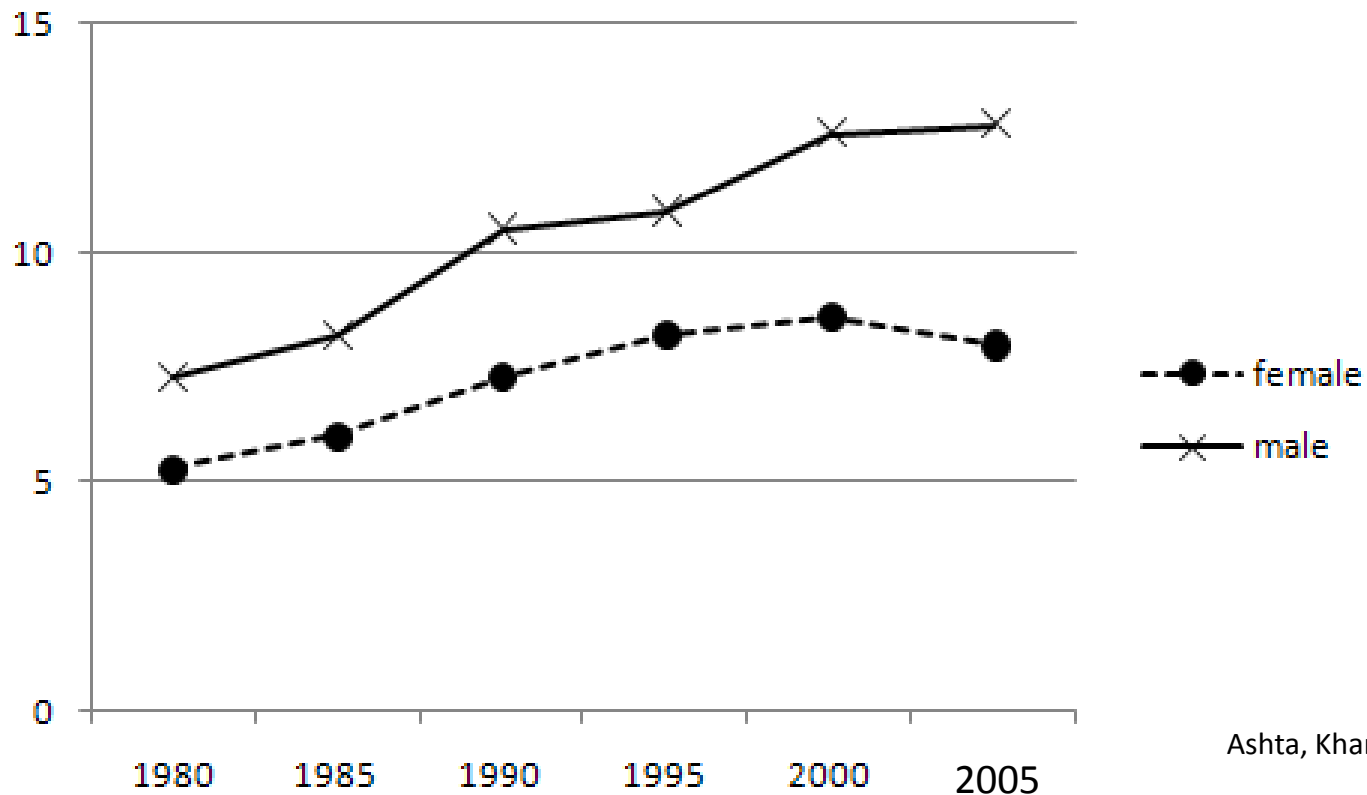
A black swan event

Enter Socio-political risk

- Andhra Pradesh
 - October 2010
- Echos of Compartamos
 - Ashta & Bush (2009)
 - Ashta & Hudon (2012)
- We decided to investigate:
 - Ashta, Khan & Otto (2011)

Is Indian Microfinance suicide extraordinary?

- Suicides in Microfinance in Andhra Pradesh do not seem to be any greater than the average suicide rate in India. However, if microfinance borrowers are mostly women, women suicides in Andhra Pradesh are higher than the average female suicide rates.



Time series data on India

- cases of suicides (especially male suicides) seem to accompany microfinance growth and penetration.
- Based on time series data from India, “the correlation between male suicide rates and the microfinance penetration is positive with $R = 0.60$ and a significance level of $p = 0.02$ ”, but no causation is implied.

Is Indian microfinance different?

Institutional characteristics	All	India
Number of MFIs reporting	1132 to 1146*	88
Personnel	104	287
Number of MFIs	1146	88
Number of active borrowers	10,487	65,008
Percent of women borrowers	63.39%	100.00%
Gross loan portfolio	4,902,526	8,405,779
Average loan balance per borrower	523	144
Number of MFIs	1141	88
Return on assets	1.50%	1.81%
Return on equity	7.27%	10.54%
Yield on gross portfolio (nominal)	27.93%	23.97%
Portfolio at risk > 30 days	4.76%	0.51%

source: <http://www.mixmarket.org/mfi/benchmarks/csv>

*All 1146 did not provide information for all indicators.

Smaller loans
 Lower interest yield
 Higher profitability !!!

Findings on Suicides & Microfinance

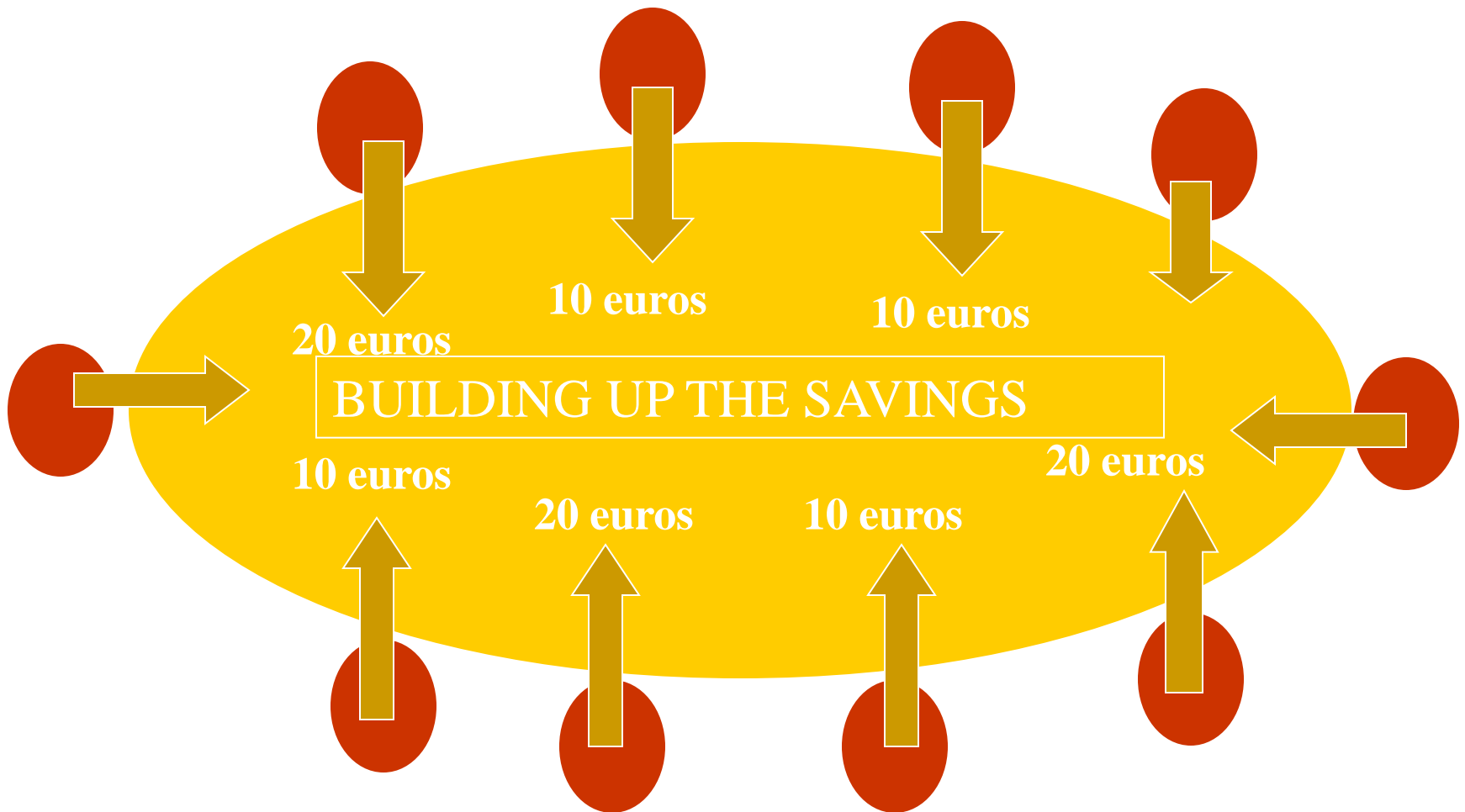
- In short, we found a lot of smoke, no fire, and wondered what is wrong
- But in any case, it made us think that borrowers may be stressed
- What can be done?

Normal Business Principles indicate

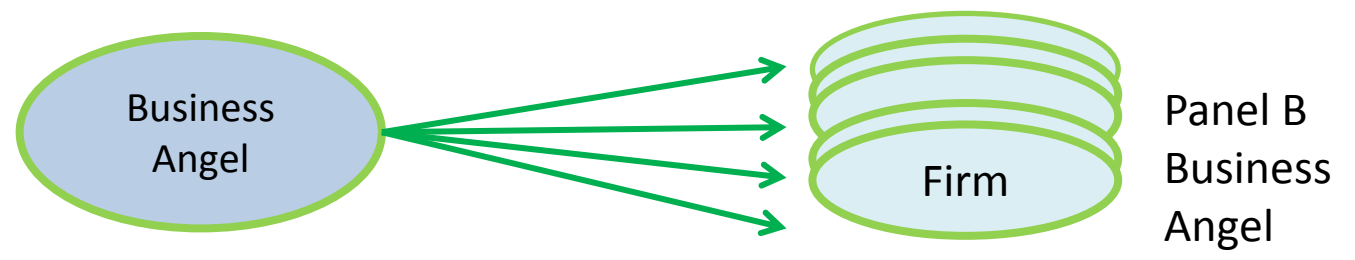
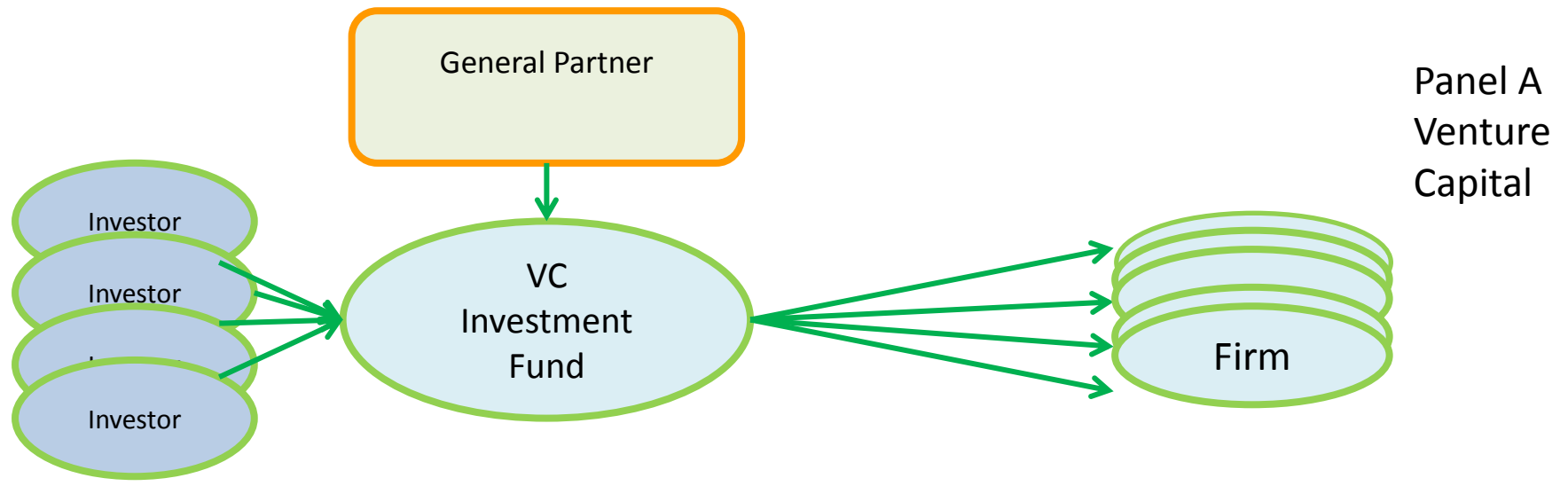
- A firm needs equity, LT debt and ST debt
- Too little debt means financial leverage is insufficient
- Too much debt reduces the risk coverage ratio
- Are poor borrowers having any equity?
- We need microequity
- If poor people don't have own money or love money, they need microangels



Microangels since 1983: The CIGALES

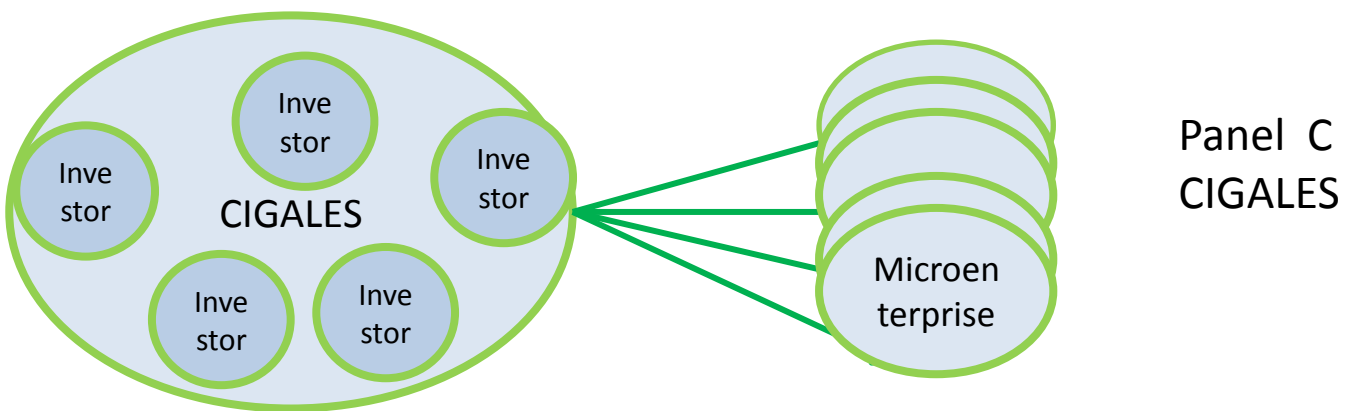


Business Models



Innovative business model

In the CIGALES Model, the investor is inside the Undivided Club



EQUITY PARTICIPATION in PROJECTS



- Attracting entrepreneurs

- Referrals, Meetings,



- Selection of the projects

- Democracy, Unanimity
- Proximity
- only companies/ cooperatives



- Nurturing the enterprise

- Monitoring, Accompanying, Coaching, networking



- Exit: Investment in capital for 5 years

- To get a tax deduction



But the movement did not grow: Blockages



Internal ideological brakes

Self-management ideology means can't ask for help

Alternative means can't expect help from mainstream

Grass-roots vision means communicating locally

National federation has chosen to communicate internally to strengthen shared values rather than externally

Left wing belief that entrepreneurs are exploiters

Difficulty in accepting high financial returns implies right wing members don't join

Internal structural motivation

5 year commitment

Starting all over again every 5 years: learning curve

Finding new members every five years

Delayed gratification is not for all

Indivision requires unanimity

Takes a year to assemble enough money to get the first project... time takes its toll on motivation
Need committed leaders but such people are in too many movements diluting their actions

External Institutional cage

Subsidies are limited and subject to fads

Low financial literacy in France

Banks are not interested since efforts are too micro

A person can be member of only one indivision

Club cannot invest in auto-entrepreneurs

No market for exit

Too many complementary actors confuses the entrepreneur

Entrepreneurs not forthcoming

Too micro financing

Small projects means don't want to create cost of incorporation

Fears of secrets being revealed

Information deficit

We did more detailed research

Estapé-Dubrueil, G., Ashta, A. & Hédou, J-P., 2012

• Profile of microangel

	N	%		N	%		N	%
<i>(a) Gender</i>			<i>(c) Profession</i>			<i>(e) Personal wealth</i>		
Women	99	36.26%	Salaried Employee	33	12.09%	Less than 50,000€	56	26.29%
Men	174	63.74%	Middle manager	65	23.81%	50,000 to 100,000€	43	20.19%
<i>(b) Level of formal education</i>			Senior Manager / liberal professional	139	50.92%	100,000 to 1 million €	105	49.30%
Primary school	0	--	CEO	25	9.16%	1 to 10 million €	7	3.29%
High-school	9	3.30%	Farmer	3	1.10%	More than 10 million €	2	0.94%
Professional school	9	3.30%	Craftsperson / shopkeeper	3	1.10%	<i>(f) % invested in equity</i>		
College (BAC+2)	41	15.02%	Others (without professional activity)	5	1.83%	less than 5%	190	89.20%
University degree (3 years)	43	15.75%	<i>(d) Actual activity status</i>			5% to 10%	10	4.69%
University degree (5 years)	151	55.31%	Working	197	72.16%	10% to 20%	4	1.88%
University degree (8 years)	20	7.33%	Retired	76	27.84%	20% - 30%	2	0.94%
						more than 30%	7	3.29%

• What they put in

	N	Range	Mean	Standard Dev.
Individual Investment	256		1,917.73	3,200.00
<i>Investm. for less than 1 year seniority members</i>	87	30 - 5,000	911.42	1,229.21
<i>Investm. for 1-2 years seniority members</i>	40	140 - 9,000	1,219.47	1,896.81
<i>Investm. for 2-3 years seniority members</i>	37	360 - 13,000	1,622.43	2,198.57
<i>Investm. for 3-4 years seniority members</i>	32	400 - 14,000	2,064.84	2,876.97
<i>Investm. for 4-5 years seniority members</i>	20	550 - 20,000	3,477.65	5,146.84
<i>Investm. for 6 to 10 years seniority members</i>	33	500 - 25,000	3,863.33	5,275.65
<i>Investm. for 11 to 15 years seniority members</i>	20	600 - 20,500	3,559.17	4,814.66
<i>Investm. for plus than 15 years seniority members</i>	4	1,000 - 2,750	1,912.50	804.54

• Profile of the project

Aspects related to the Project	Range	Mean	Standard Dev.	Graded 5 in	Graded 1 in
Societal and solidarity aspects	1 - 5	4.31	0.91372	54.39%	0.84%
Economic viability	2 - 5	4.25	0.77361	43.93%	0.00%
Environmental impact	1 - 5	3.80	1.04993	29.29%	3.77%
Social impact	1 - 5	3.79	1.03330	28.87%	2.93%
Potential to contribute to local development	1 - 5	3.68	1.08115	24.69%	3.77%
Good potential market for the product/service offered	1 - 5	3.60	0.93808	15.90%	2.09%
Financial resources available (other than investment by the CIGALES)	1 - 5	3.18	0.91959	5.86%	3.77%
Founder's equity	1 - 5	2.97	1.04087	6.69%	8.79%
Number of jobs being created	1 - 5	2.91	1.00414	6.28%	7.11%
Located near the club	1 - 5	2.81	1.22500	8.37%	17.99%
Legal form of the business	1 - 5	2.60	1.21862	7.53%	22.18%
High growth sector (currently / in next years)	1 - 5	2.50	0.99103	2.09%	16.32%
Start-up project	1 - 5	2.39	1.15375	3.77%	25.94%
Located in a disadvantaged area	1 - 5	2.26	1.00718	2.51%	24.69%
Technically innovative	1 - 5	2.16	0.97437	1.26%	28.87%

• What they want to get

<i>Expected ROI</i>	N	%
no expectations (of recovery)	35	16.4%
recover the capital without more	105	49.3%
recover the capital plus 2%	29	13.6%
recover the capital plus 3% -5%	28	13.1%
recover the capital plus 6% -10%	13	6.1%
recover the capital plus 10% -20%	1	0.5%
recover more than a 30%	2	0.9%

Our questions for you

- In France, microenterprise can be companies which take in Equity
- Q How do you give microequity to individual entrepreneurs?
- Q How can you separate their firm revenue from personal revenue if money is fungible?
- Q What are the simplest corporate forms to implement for illiterate people?

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