Can You Teach a Person to Fish? Evidence From a Microfinance Privatisation Experiment

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   - Can this approach flourish in finance?
3. Self-Help Groups are interesting
   - Widespread: 100 million clients globally and growing
   - "Micro"-microfinance, reach poorest populations

What are Self-Help Groups (SHGs)?

- Essential tiny (e.g., 20 person) credit/savings cooperatives
  - Self-financed: funds come from member savings, go to member loans
  - Members meet and save weekly and can borrow over the course of a cycle
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- Quasi-formal: evaluate loans, keep books, have a standing fund
- Requires someone with skills to found/administer
  - Status quo: NGO (CRS) trains “field agents” (FAs), then pays them wage to found/administer groups
  - Problem: Costly, expensive to scale up, limits number of clients reached

This paper

Considers innovation: CRS trains agents but spins them off as private service providers (PSPs), i.e., entrepreneurs

- Is this approach effective?
- Why or why not?

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- Treatment: NGO-trained PSPs (private entrepreneurs) vs. NGO-trained FAs (paid wage workers) in the delivery of SHG services
- Evaluate:

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- Evaluate:
  - Provision of services
  - Effectiveness of services
  - Potential mechanisms

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- This result differs drastically from other programs (e.g., health services)

Our Simple Explanation

Two types of agents decide whether to enter or not

		Bad Types	
		Join	Don't Join
Good Types	Join	(150,110)	(250,100)
	Don't Join	(160,105)	(160,100)

Under Privatization

Joiners pay small fee (of 20)

		Bad Types	
		Join	Don't Join
Good Types	Join	(150-20,110-20)	(250-20,100)
	Don't Join	(160,105-20)	(160,100)

Under Privatization

Fee drives out bad types, good types enter

		Bad Types	
		Join	Don't Join
Good Types	Join	(130,90)	(230,100)
	Don't Join	(160,85)	(160,100)

Talk Outline

1. Simple Model

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    - What are impacts of privatization?
    - Why?

Model Environment

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- Large project uses $\overline{k} > 1$ (needs financing), pays $\overline{A} > \underline{A}$
- Agent only has large project with probability π
- Everything observable, except type

Two important assumptions

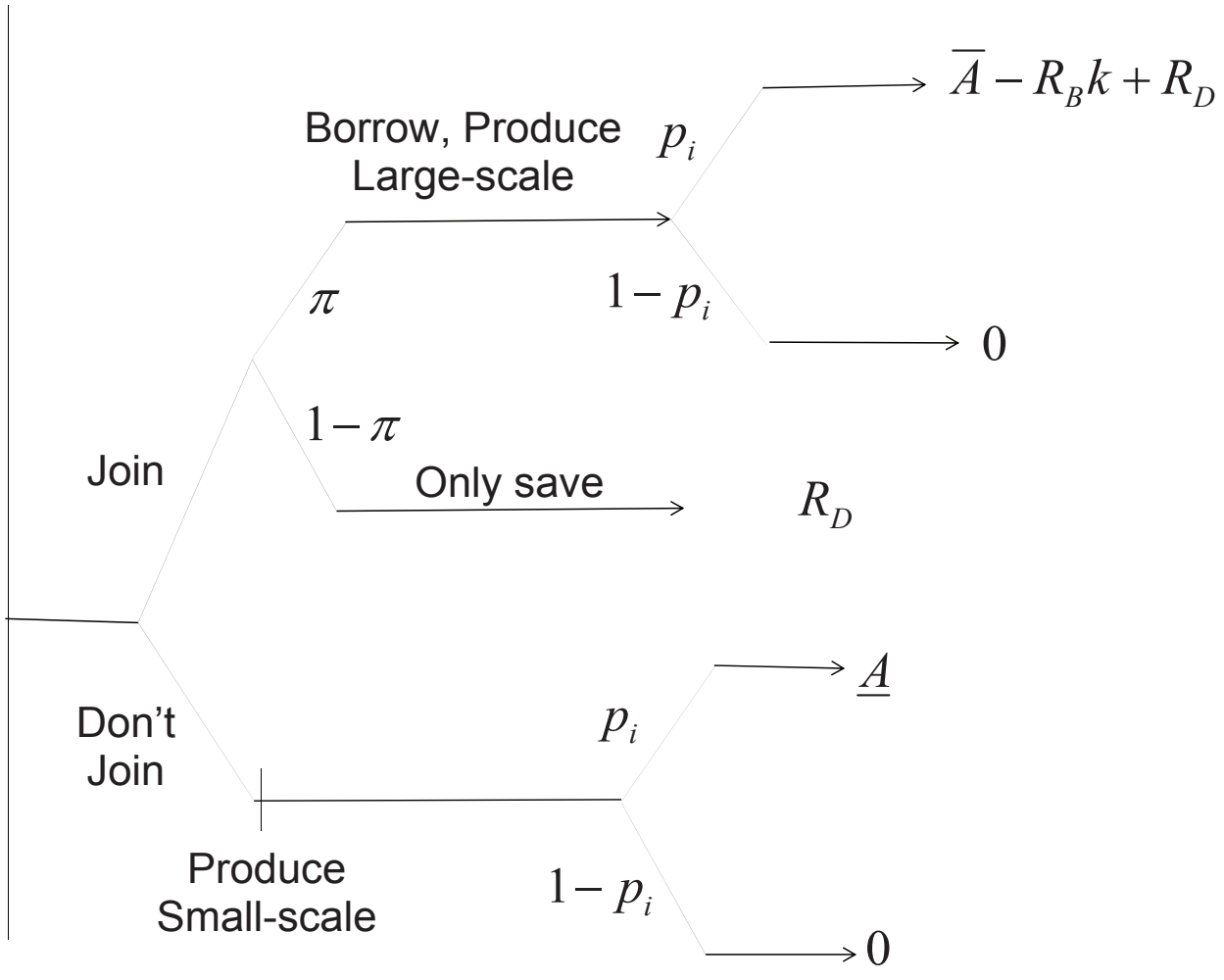
Potential adverse selection problem exists:

$$p_L \overline{A} < p_H \underline{A}$$

Type-H have higher surplus as a group:

$$\theta p_L < (1-\theta) p_H$$

Model Timeline



Payoffs

- Large-scale

$$p_i \left(\overline{A}k - R_B k \right) + p_i R_D$$

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$$p_i \left(\underline{A} - R_B \right) + p_i R_D$$

- Saves

$$R_D$$

Payoffs

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- Small scale

$$p_i \left(\underline{A} - R_B \right) + p_i R_D$$

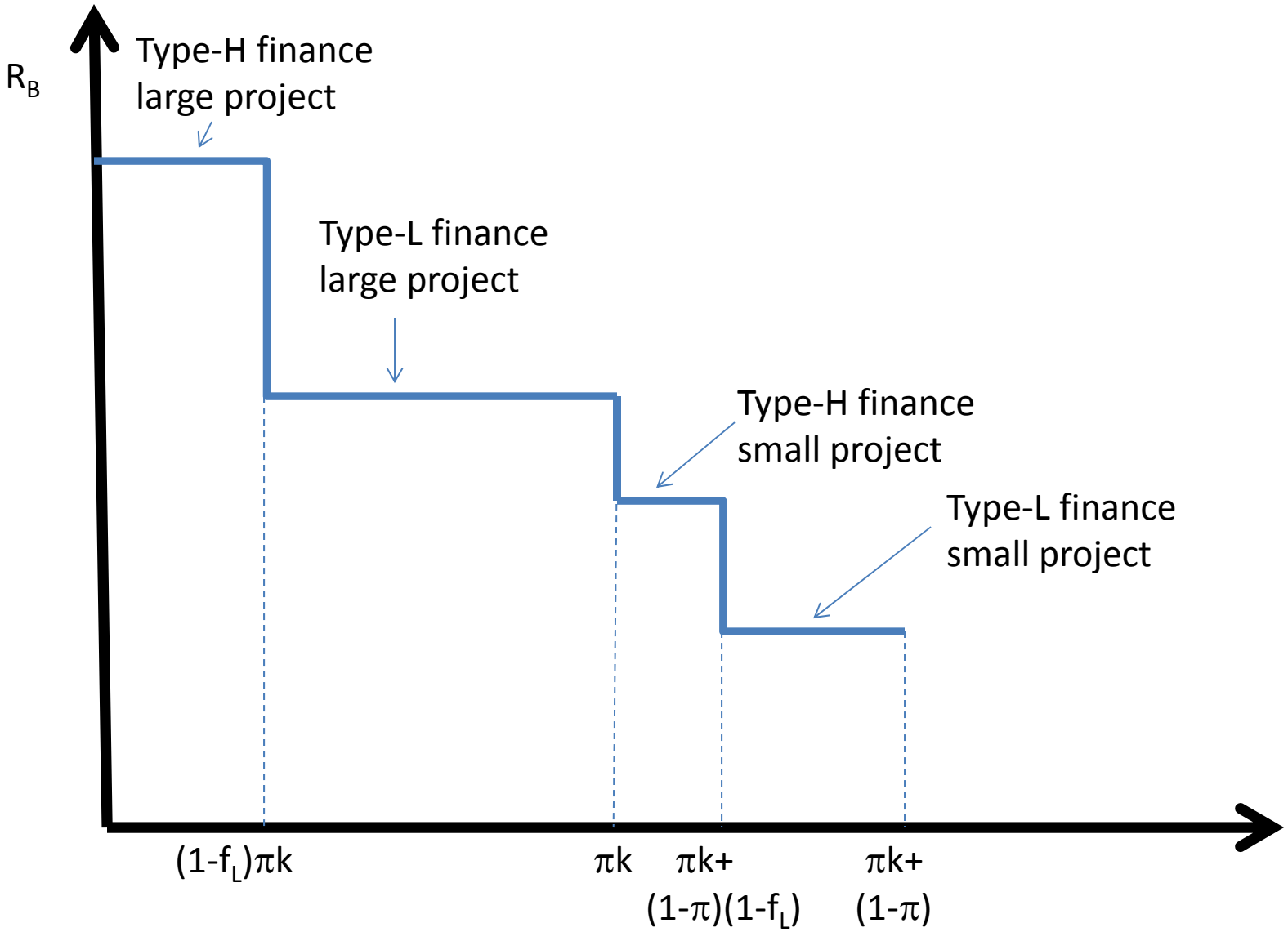
- Saves

$$R_D$$

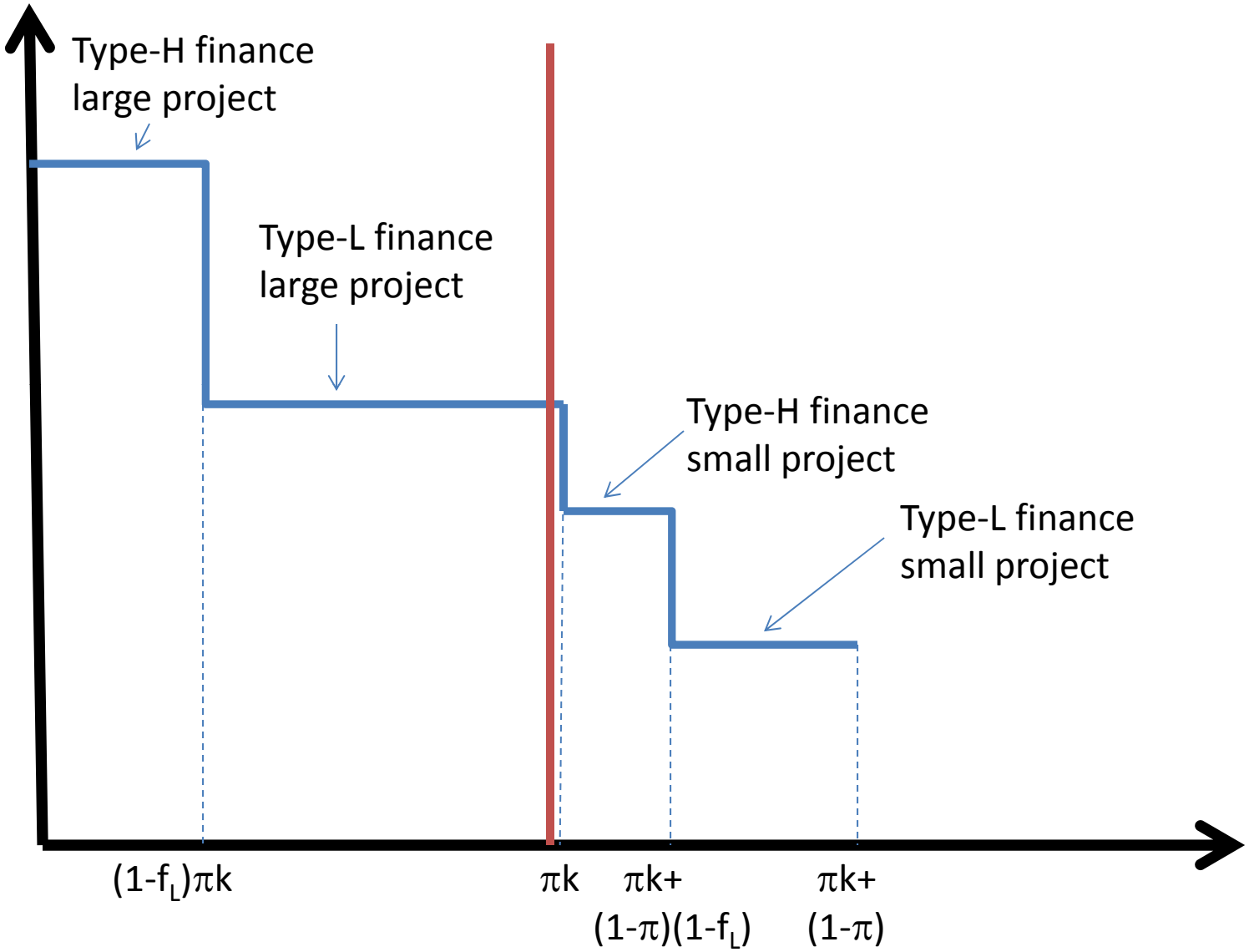
- Doesn't join

$$p_i \underline{A}.$$

Per member demand for loans is step-function

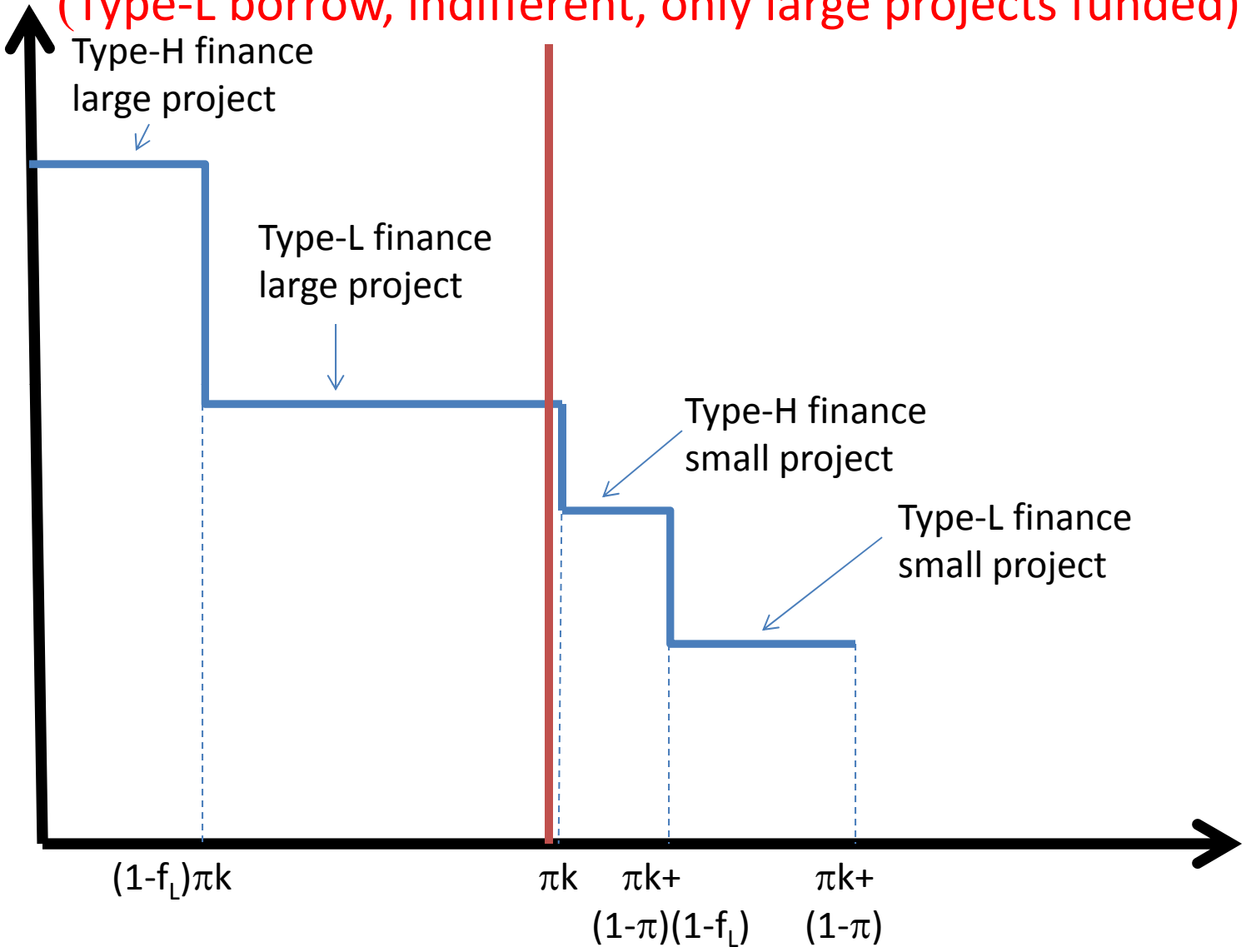


Per member supply of savings is inelastic at 1



Simplify: $\pi k=1+\varepsilon$:

(Type-L borrow, indifferent, only large projects funded)



Benefits

- Equilibrium wedge ϕ increasing in fraction Type-L

$$\frac{R_B}{R_D} = \phi\left(f_L\right)$$

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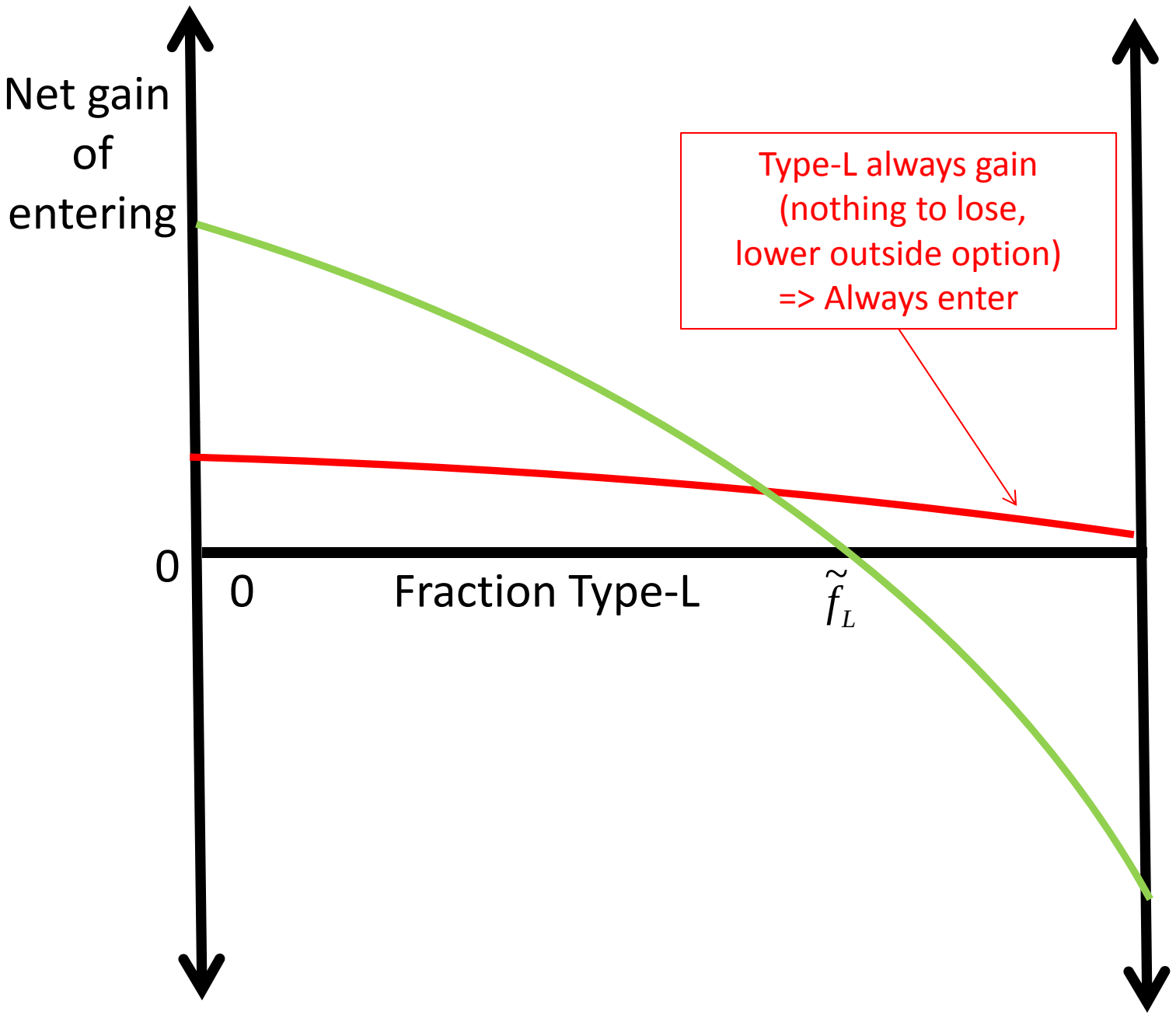
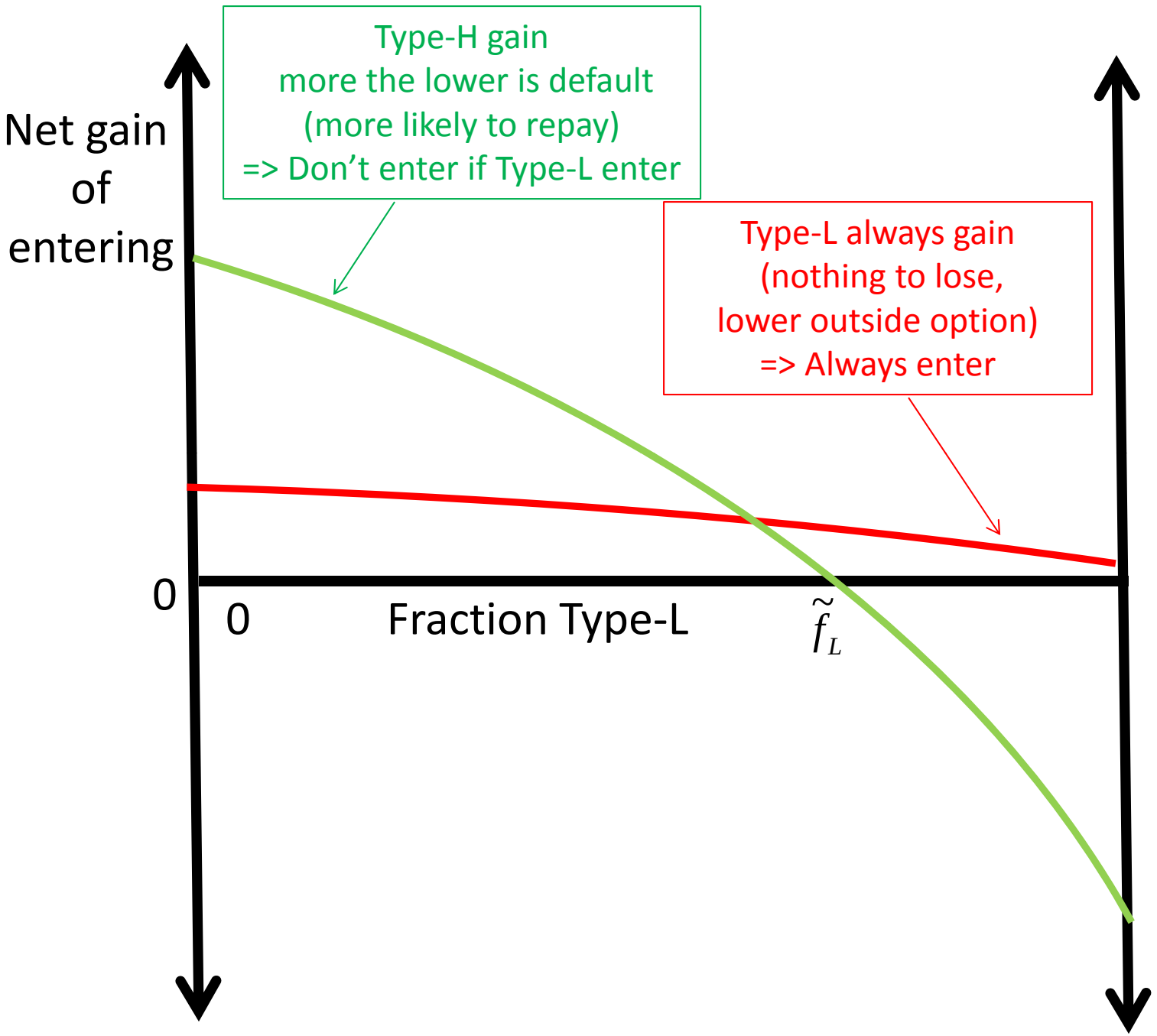
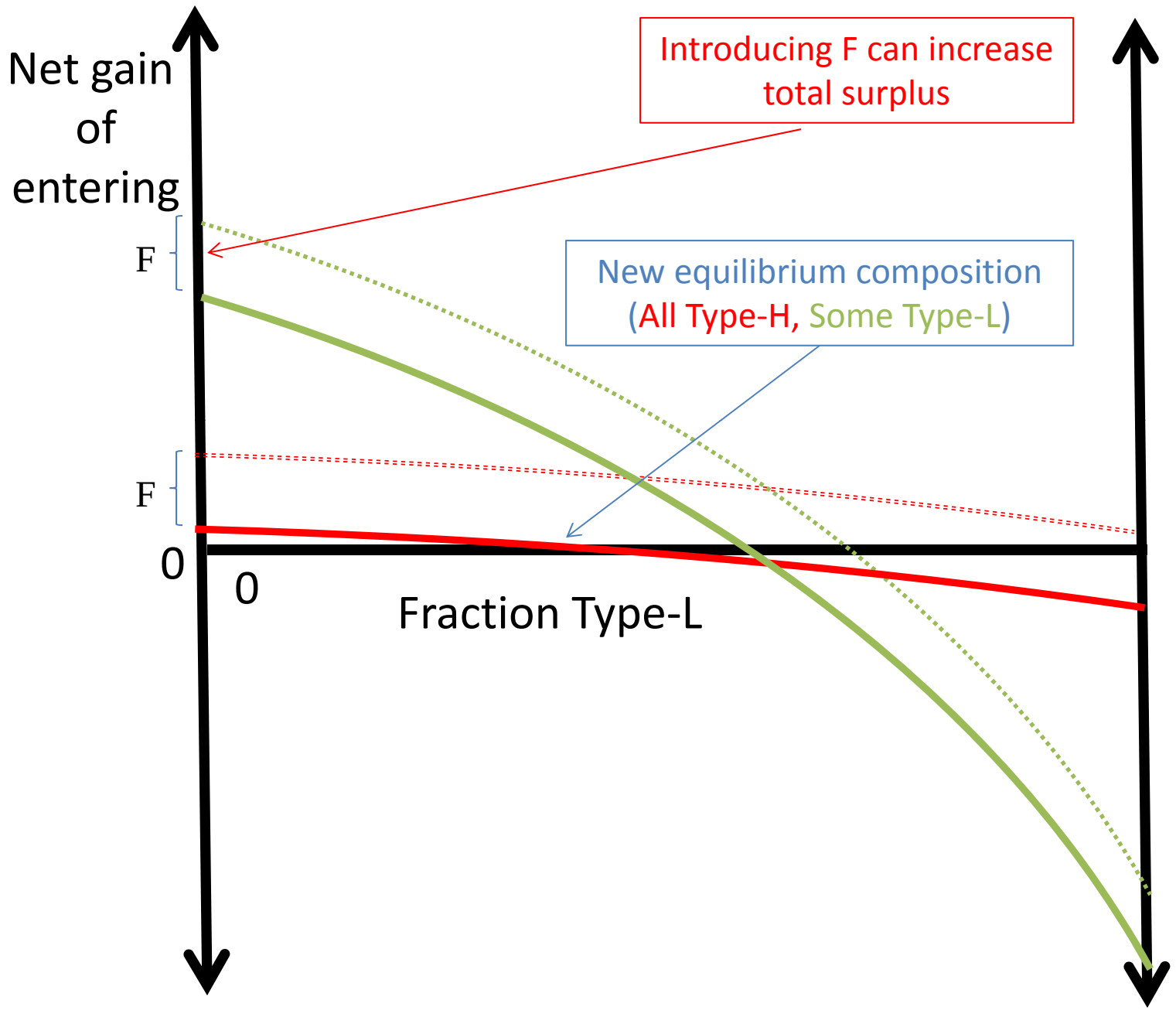
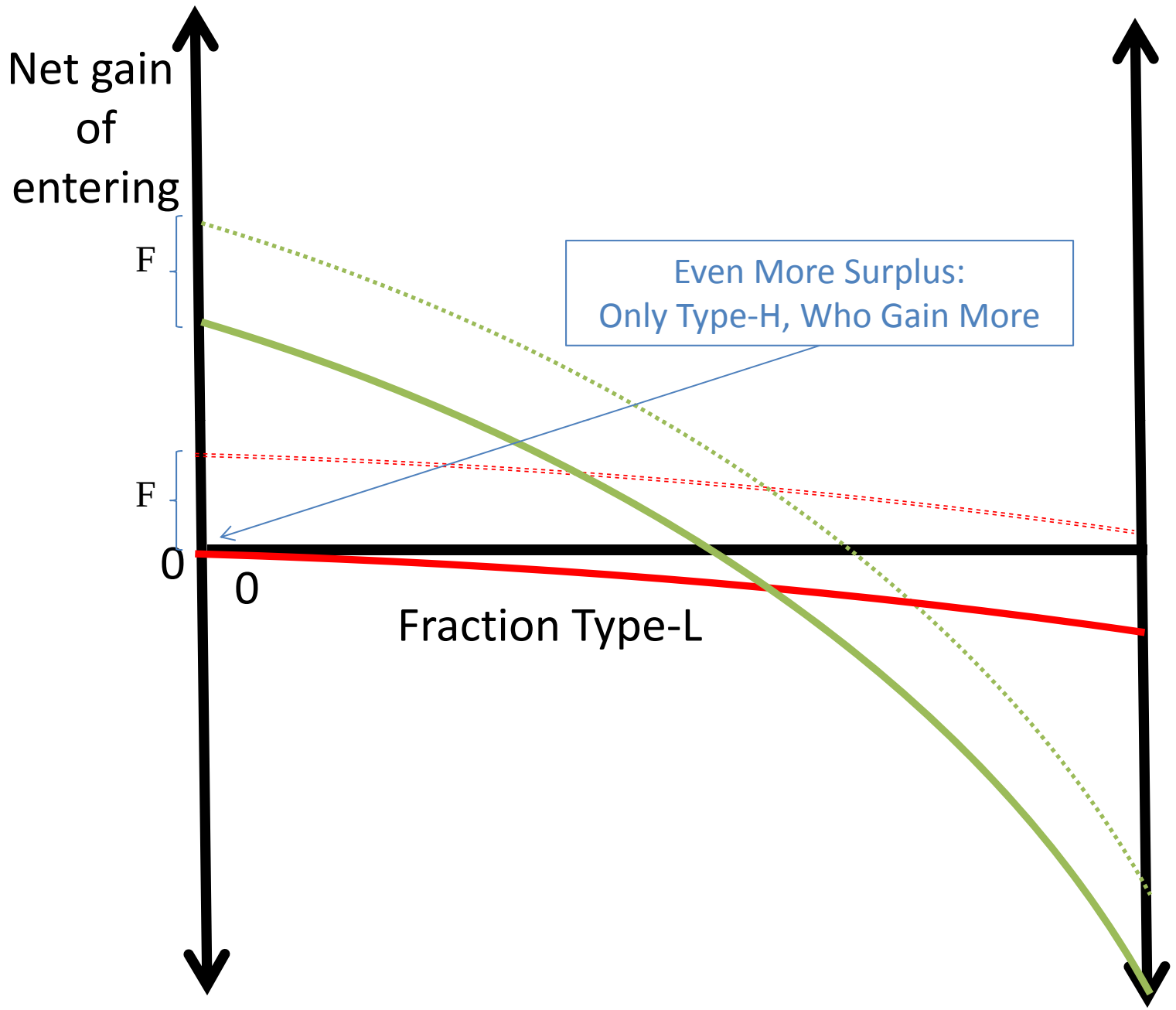
$$\frac{R_B}{R_D} = \phi\left(f_L\right)$$

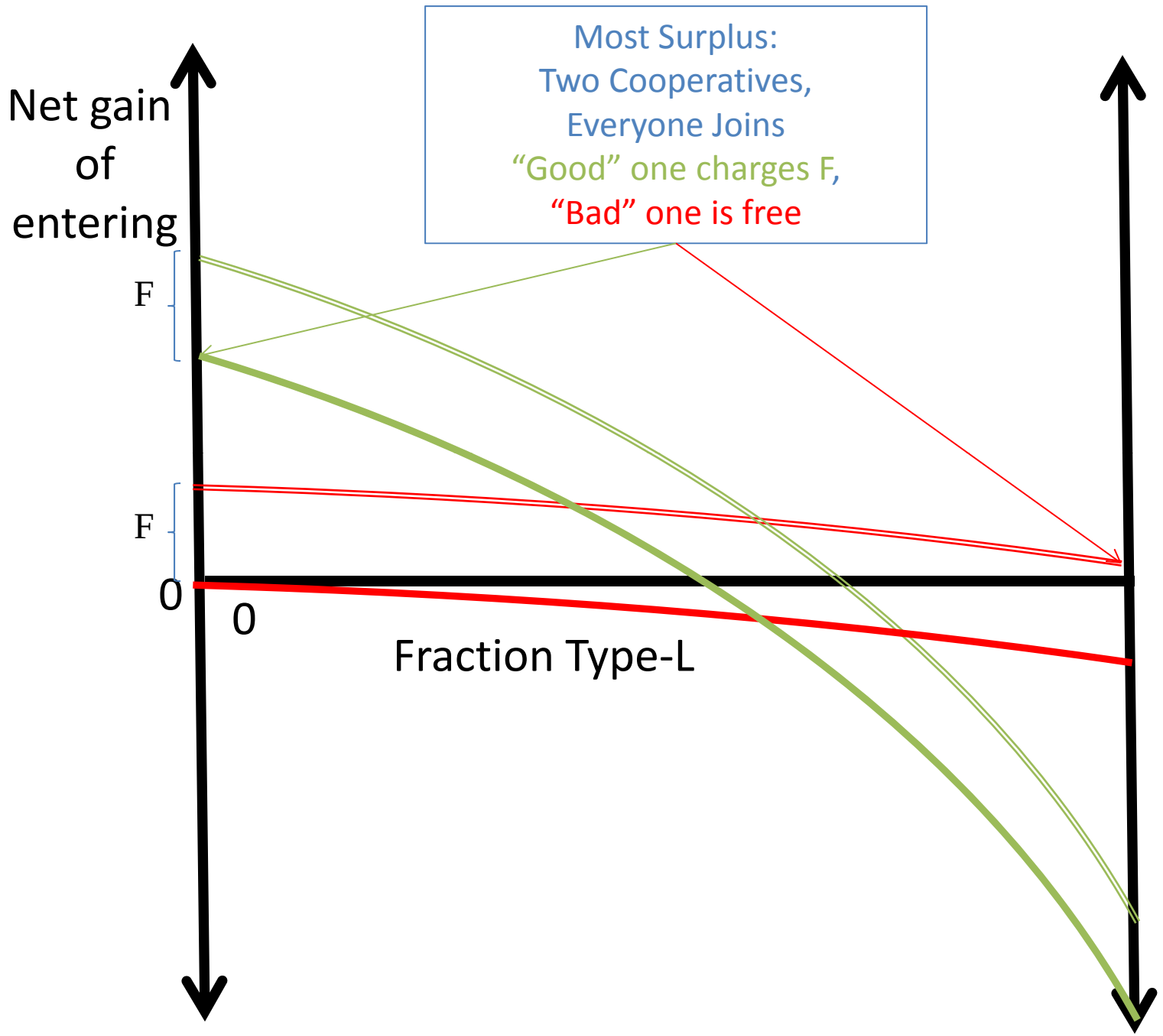
- Two forces:
  - More productive projects (benefit for all)
  - Composition (can only benefit Type-L but only hurt Type-H)


Net gain of entering
Type-L always gain
(nothing to lose,
lower outside option)
=> Always enter
0
0
Fraction Type-L
$\tilde{f}_L$


Type-H gain
more the lower is default
(more likely to repay)
=> Don't enter if Type-L enter
Type-L always gain
(nothing to lose,
lower outside option)
=> Always enter
Net gain
of
entering
0
0
Fraction Type-L
$\tilde{f}_L$


Net gain of entering
F
F
0
0
Fraction Type-L
Introducing F can increase total surplus
New equilibrium composition
(All Type-H, Some Type-L)


Net gain of entering
F
F
0
0
Even More Surplus:
Only Type-H, Who Gain More
Fraction Type-L


Most Surplus:
Two Cooperatives,
Everyone Joins
"Good" one charges F,
"Bad" one is free
Net gain of entering
F
F
0
0
Fraction Type-L

Evaluation Methods

Evaluation Methods

- Randomized Control Trial:
  - some areas randomly get PSPs (185 agents)
  - some areas randomly get FAs (91 agents)
  - limitation: no true control (neither PSP nor FA), so we can only see relative impact


Morocco
Algeria
Libyan Arab Jamahiriya
Egypt
Western Sahara
Mauritania
Mali
Niger
Chad
Sudan
Senegal
Burkina Faso
Guinea
Benin
Cote D'Ivoire
Ghana
Nigeria
Central African Republic
Ethiopia
Somalia
Cameroon
Uganda
Kenya
Gabon
Democratic Republic of the Congo
Congo
Tanzania
EAST AFRICA
Angola
Zambia
Malawi
Mozambique
Zimbabwe
Namibia
Botswana
South Africa
Madagascar
0
580
1,800 Miles


Juba
Yei
Aba
Nimule
Gulu
Lodwar
Lake Turkana
Mandera
Moyale
Bardera
Wajir
Soroti
Bunia
UGANDA
Mbale
Kitale
Eldoret
KENYA
Fort Portal
Jinja
Kampala
Kakamega
Nakuru
Meru
Entebbe
Kisumu
Nyeri
Garissa
Giamam
Kismayu
Mbarara
Masaka
Lake Victoria
Nairobi
Thika
Machakos
Kigali
RWANDA
Musoma
Lamu
Mwanza
Magu
Arusha
Moshi
Malindi
Mombasa
Bujumbura
BURUNDI
Shinyanga
Same
Kigoma
Singida
Tanga
Tabora
Korogwe
Zanzibar
Lake Tanganyika
Dodoma
Bagamoyo
Kilosa
Mpanda
TANZANIA
Morogoro
Dar es Salaam
Iringa
Rufiji
Sumbawanga
Mbeya
Lake Mweru
Lindi
Mtwara
Kasama
Songea
Lake Malawi
Ruvuma
Mzuzu
Moroni
Key: Pol
Major
Major

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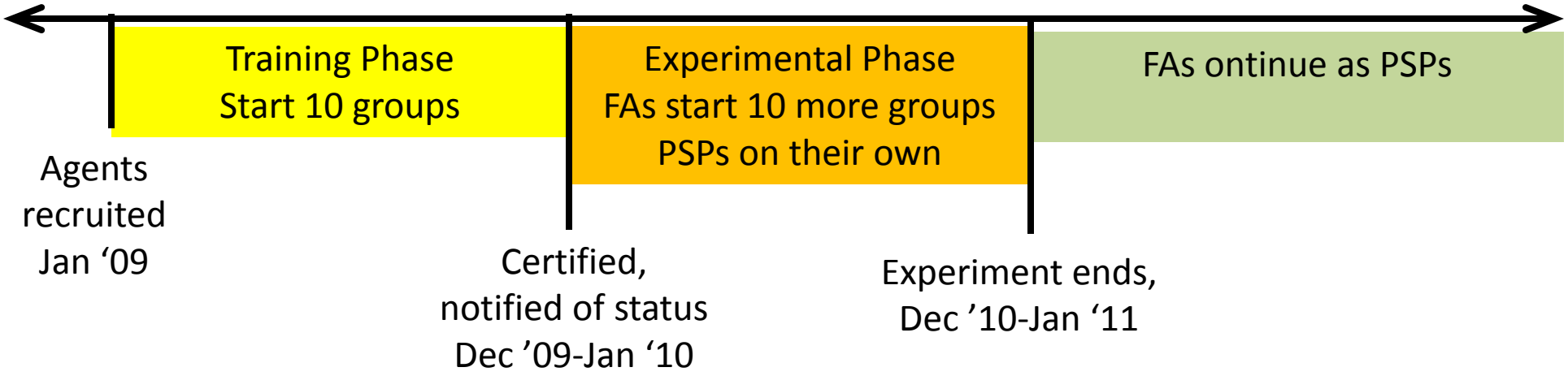
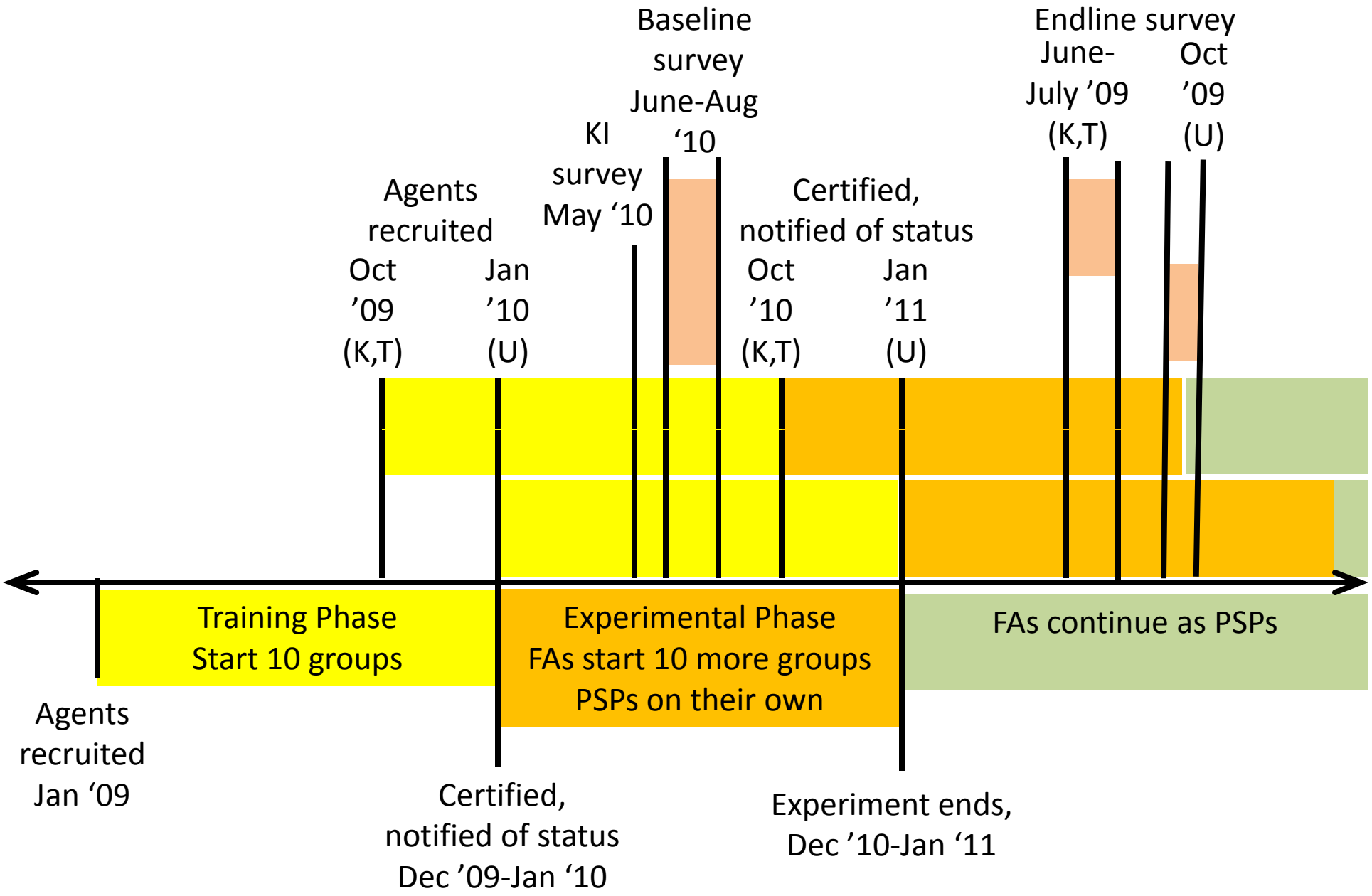
- Data:
  1. MIS data (quarterly: membership, credit, savings, profits, etc.)
  2. Agent survey (biannual: agent characteristics, effort, payment, etc.)
  3. HH survey (baseline and endline: credit, savings, income, consumption, risk response, etc.)
  4. Village chief survey (baseline: village characteristics)


Training Phase
Start 10 groups
Experimental Phase
FAs start 10 more groups
PSPs on their own
FAs ontinue as PSPs
Agents recruited Jan ‘09
Certified, notified of status Dec ’09-Jan ‘10
Experiment ends, Dec ’10-Jan ‘11


Baseline survey June-Aug '10
Endline survey June-July '09 (K,T)
Endline survey Oct '09 (U)
KI survey May '10
Agents recruited Oct '09 (K,T)
Agents recruited Jan '10 (U)
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- Randomization worked: only rare differences in “before” data in agents, households, villages
- One complication:

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- One complication:
  - In two regions, PSP areas were randomly more educated.
  - Luckily results are robust to dropping these areas (Mombasa, part of Mwanzaa)

Agent, Group Impact Regression Equation

$$Y_{idnt} = \alpha_{dt} + X_i\beta + \gamma wave_i + \sum_{s=1}^{4} \delta_s PSP_{ns} + \varepsilon_{itdn}$$

Relative Impact of PSP on SHGs

Quart.	No. Groups	Savings	Credit	Profits	Agent Pay
1st	***-4	**-1700	***-2000	-1	***-150
2nd	***-3	**-1400	*-1300	**5	***-110
3rd	-1	600	700	***7	***-50
4th	3	1800	*2100	*6	**-40
Avg.	19	6200	5900	20	160

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  - After training and one year, it costs half
  - This underestimates the savings, since PSPs are free thereafter
  - But do the members/clients also benefit?

Household Impact Regression Equation

$$Y_{jdn} = \alpha_d + X_j\beta + \delta PSP_n + \varepsilon_{jdn}$$

Relative Impact of PSP on Household Savings

	Total Savings	Source: Business	Source: Agric.	Purpose: Business	Purpose: Agric.
PSP	16	**16	7	***16	0
Avg.	132	15	41	4	39

Relative Impact of PSP on Household Borrowing

	Total Credit	Source: SHG	Source: Other	Purpose: Business	Purpose: Agric.
PSP	***29	**5	**25	***8	***10
Avg.	41	7	32	4	4

Relative Impact of PSP on Household Prod. Decisions

	New Business	Bus. Invest.	No. of Employ	Hours in Bus.	Hours in Ag.
PSP	5%	***20	**0.12	**3	*-3
Avg.	20%	22	0.11	9	31

Relative Impact of PSP on Household Income, Cons.

	Total Income	Bus. Income.	Total Expend.	Total Cons.	Food Cons.
PSP	130	10	*210	*180	*-3
Avg.	360	50	1600	1560	31

Why the difference?

- No evidence that PSPs work harder on average (similar hours, distance)
- No evidence that clients of PSPs work harder (similar total hours)

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- BUT, evidence of adverse selection story
  - PSPs cater to different populations
  - Fees matter for outcomes

Membership Selection Regression Equation

$$M_{jvn} = \alpha_v + X_j\beta + \eta_1 Z_j^{baseline} + \eta_2 PSP_n Z_j^{baseline} + \varepsilon_{jn}$$

Endline Membership on Baseline Characteristics*PSP

	New Business	Bus. Invest.	No. of Employ	Hours in Bus.	Hyper. Discount
Direct	5e-6%	-2e-6	-5e-3	0.01	-0.06
Interact	***2e-4%	***3e-4	**0.23	*0.12	***0.17
Inter*S.D.	***0.09%	*0.05	**0.08	*0.06	0.09

Impact of Village Fee Type on Provision Equation

$$Y_{vdt} = \alpha_{dt} + \gamma wave_i + \varpi_1 NoFee_v + \varpi_2 OneFee_v + \varpi_3 MultiFee_v + \varepsilon_i$$

Total Impacts by Type of Village

	Members	Groups	Savings	Credit	Profits
No Fee	-4	0	-64	-45	5
Single	-7	-1	4	41	-9
Multiple	***37	***2	***969	***1020	***47
Avg.	52	3	860	820	38

Per-Group Impacts by Type of Village

	Members	Savings	Credit	Profits
No Fee	***3	20	39	***9
Single	***7	***239	***283	***10
Multiple	***5	***141	***150	***8
Avg.	17	260	220	15

Conclusions

- Privatized delivery, cost reduction is more cost-effective, more effective
  - Microfinance differs from other services
- Appears to work through fees solving adverse selection
  - potentially accomplished without privatizing?
- Detail of delivery of microfinance services is crucial

- Privatized delivery follows “microfinance for investment” narrative

Impacts on PSP Members

	Total Savings	SILC Savings	Total Credit	SILC Credit
PSP Memb.	16	**16	**60	***30
	Total Income	Total Expend.	Total Cons.	
PSP Memb.	*100	***420	***410	
	Bus. Invest	Bus. Employ.	Entre. Hours	
PSP Memb.	20	*0.2	2	

Table 1: Summary Statistics SILC versus non SILC

	SILC		Non-SILC		SILC - Non-SILC
	Mean	Std. Dev.	Mean	Std. Dev.	Mean △
Savings	153	371	131	263	24
Credit	48	165	45	236	1.2
Income	289	485	356	665	-68*
Consumption	1477	1573	1466	1616	11
Business Owner	0.55	0.5	0.36	0.48	0.19***
No Schooling	0.22	0.41	0.21	0.41	0.01
Some Primary	0.26	0.44	0.22	0.41	0.04*
Primary Completed	0.4	0.49	0.44	0.5	-0.04
Secondary	0.11	0.32	0.10	0.31	0.01
Tertiary	0.02	0.13	0.03	0.16	-0.01
Observations	968		951		

***, **, * indicate statistical significance at the 1%, 5%, and 10% confidence level, respectively.

Table 7: Key Informant Mean Comparisons

	PSP			FA			PSP-FA
	Mean	Std. Dev.	Obs.	Mean	Std. Dev.	Obs.	Mean △
Population	1292	1466	139	1120	1166	55	171
Power Grid	0.27	0.44	139	0.22	0.42	55	0.04
Months Inaccessible	2.8	3.8	139	2.6	2.9	55	0.22
Bank Distance	27	28	139	23	17	55	3.5
Primary	0.74	0.44	139	0.65	0.48	55	0.09
Secondary	0.36	0.48	138	0.34	0.48	55	0.02
Post Secondary	0.06	0.24	136	0.07	0.25	54	-0.01
Hospital	0.43	0.50	137	0.44	0.50	55	-0.01
Factory	0.06	0.23	137	0.05	0.23	53	.0004
MFI	0.14	0.35	136	0.23	0.43	52	-0.09
Bank	0.02	0.15	137	0.02	0.14	54	0.003
ROSCA	0.76	0.43	132	0.65	0.48	52	0.11
ASCA	0.66	0.48	123	0.61	0.49	49	0.05
SACCO	0.16	0.37	138	0.11	0.32	55	0.05
FSA	0.05	0.23	122	0.06	0.23	51	-0.004
Mobile Money	0.12	0.33	137	0.10	0.31	55	0.02
Moneylender	0.19	0.39	132	0.15	0.36	54	0.04
Drought	0.58	0.35	121	0.61	0.38	51	-0.03
Flood	0.49	0.35	92	0.55	0.38	36	-0.06
Crop Failure	0.51	0.34	88	0.52	0.39	37	-0.01
Animal Disease	0.41	0.32	68	0.21	0.24	30	0.20***
Bandits	0.29	0.31	36	0.19	0.24	20	0.10
Violence	0.77	0.32	12	0.67	0.45	6	0.10

***, **, * indicate statistical significance at the 1%, 5%, and 10% confidence level, respectively.

Table 8: Household Level Randomization Results - Outcomes

	PSP	s.e.	FA mean	Sample mean	Median	Obs.
Total Savings	-3	(20)	137	137	49	1877
Savings for Business Owners	-9	(22)	156	156	75	865
Savings from Business Profits	-5	(10)	35	32	0	1877
Savings from Agric. Profits	3	(9)	25	29	0	1877
Savings from Salary/wage	-4	(8)	16	17	0	1877
Savings used for New Agric. Activity	-7	(15)	40	38	0	1877
Savings used for New Non-Agric. Activity	4	(4)	5	8	0	1877
Savings used for Existing Business	2	(9)	16	20	0	1877
Total Credit	3	(14)	42	47	3	1877
Credit for Business Owners	14	(17)	41	54	6	865
Credit from SILC	0.48	(0.92)	3.7	4	0	1877
Credit from Formal Lenders	6	(13)	26	33	0	1877
Credit from Informal Lenders	-3	(3)	12	10	0	1877
Credit used for Agric. Activity	5	(6)	7	11	0	1877
Credit used to Expand Business	7	(5)	6	11	0	1877
Credit used to start New Business	0.14	(0.78)	1	1	0	1877
Start New Business	0.03	(0.04)	0.25	0.26	0	1877
Business Investment	-3	(1)	42	40	0	1877
Hours spent in Business	0.53	(2)	15	15	4	1877
Non-HH Employees	-0.12	(0.21)	0.42	0.32	0	1877
Hours spent in Employee	0.6	(2)	15	16	12	1877
Agric. Investment	6	(10)	48	53	11	1877
Hours spent in Agric.	-0.47	(2)	27	27	25	1877
Total Income	98*	(57)	274	346	189	1877
Business Income	9	(15)	59	65	0	1877
Total Expenditure	73	(118)	1454	1519	1118	1877
Total Consumption	74	(116)	1400	1466	1074	1877

***, **, * indicate statistical significance at the 1%, 5%, and 10% confidence level, respectively.

Notes: The results are estimated coefficients for a regression of the stated outcome on a PSP dummy and the following controls: age, age squared, gender, number of men, woman and children in the household, dummies for schooling i.e. some primary, primary completed, secondary, and tertiary with a baseline of no schooling. Standard errors are robust standard errors, and theyare clustered at the village level. All regressions are weighted.

Table 9: Agent Level Results

	Groups	Members	Savings	Loans	Loan Value	Profit	Payment
All Quarters	-2***	-44*	-640	-19*	-640	7	-100***
	(1)	(23)	(670)	(17)	(680)	(30)	(7)
Quarter 1	-4***	-76***	-1680**	-53***	-1960***	-88***	-149***
	(1)	(23)	(690)	(16)	(680)	(29)	(5)
Quarter 2	-2***	-48**	-1360**	-28*	-1260*	33	-107***
	(1)	(22)	(690)	(17)	(710)	(29)	(8)
Quarter 3	-1	-20	570	12	650	26	-52***
	(1)	(29)	(820)	(22)	(850)	(41)	(16)
Quarter 4	3	11	1840	36	2060*	154***	-41**
	(2)	(43)	(1490)	(37)	(1690)	(63)	(23)
Observations	846	846	846	846	846	846	846
ControlMean	19	380	6200	200	5900	210	160

***, **, * indicate statistical significance at the 1%, 5%, and 10% confidence level, respectively.

Notes: The results are estimated coefficients for a regression of the stated outcome on a PSP or PSP*Quarter dummy and the following controls: age, age squared, gender, number of languages spoken, number of children, number of financial dependents, dummies for schooling i.e. some primary, primary completed, secondary, and tertiary with a baseline of no schooling, and cohort. Standard errors are robust standard errors. All regressions are weighted.

Table 10: Group Level Results

	Members	Savings	Loans	Loan Value	Profit	Payment
All Quarters	0	0	0	-5	5*	-4***
	(1)	(29)	(1)	(29)	(2)	(1)
Quarter 1	1	-14	0	-40	-1	-7***
	(1)	(31)	(1)	(30)	(3)	(1)
Quarter 2	0	-34	0	-33	5**	-5***
	(1)	(32)	(1)	(33)	(2)	(1)
Quarter 3	0	40	1	43	7***	-2***
	(1)	(33)	(1)	(34)	(3)	(1)
Quarter 4	-2**	25	0	28	6**	-3***
	(1)	(46)	(1)	(52)	(4)	(1)
Observations	15259	15259	15258	15258	8219	13800
Control Mean	20	330	11	310	21	9

***, **, * indicate statistical significance at the 1%, 5%, and 10% confidence level, respectively.

Notes: The results are estimated coefficients for a regression of the stated outcome on a PSP dummy and the following controls: age, age squared, gender, number of men, woman and children in the household, dummies for schooling i.e. some primary, primary completed, secondary, and tertiary with a baseline of no schooling. Standard errors are robust standard errors, and theyare clustered at the village level. All regressions are weighted.

Table 11: Household Savings Results

	PSP	s.e.	FA mean	Sample mean	Median	Obs.
Total Savings	16	(16)	132	141	61	1891
Savings for Business Owners	-3	(22)	156	153	83	865
Savings from Business Profits	16**	(7)	15	24	0	1891
Savings from Agric. Profits	7	(13)	41	37	0	1891
Savings from Salary/wage	8	(7)	10	15	0	1891
Savings used for New Agric. Activity	0.25	(11)	39	37	0	1891
Savings used for New Non-Agric. Activity	-2	(2)	4	3	0	1891
Savings used for Existing Business	16***	(5)	4	15	0	1891

***, **, * indicate statistical significance at the 1%, 5%, and 10% confidence level, respectively.

Notes: The results are estimated coefficients for a regression of the stated outcome on a PSP dummy and the following controls: age, age squared, gender, number of men, woman and children in the household, dummies for schooling i.e. some primary, primary completed, secondary, and tertiary with a baseline of no schooling. Standard errors are robust standard errors, and theyare clustered at the village level. All regressions are weighted.

Table 11: Household Savings Results

	Savings		Source			Purpose		
	Total	Business Owners	Business Profit	Sell Agric. Product	Salary or Wage	New Agric. Activity	New Non-Agric. Activity	Existing Business
PSP	16	-3	16**	7	8	0.25	-2	16***
s.e.	(16)	(22)	(7)	(13)	(7)	(11)	(2)	(5)
FA mean	132	156	15	41	10	39	4	4
Sample mean	141	153	24	37	15	37	3	15
Median	61	83	0	0	0	0	0	0
Observations	1891	865	1891	1891	1891	1891	1891	1891

***, **, * indicate statistical significance at the 1%, 5%, and 10% confidence level, respectively.

Notes: The results are estimated coefficients for a regression of the stated outcome on a PSP dummy and the following controls: age, age squared, sex, number of men, woman and children in the household, dummies for schooling i.e. some primary, primary completed, secondary, and tertiary with a baseline of no schooling. Standard errors are robust standard errors, and theyare clustered at the village level. All regressions are weighted.

Table 12: Household Credit Results

	PSP	s.e.	FA mean	Sample mean	Median	Obs.
Total Credit	29**	(11)	41	56	11	1877
Credit for Business Owners	27***	(8)	32	50	15	865
Credit from SILC	5**	(2)	7	10	0	1877
Credit from Formal Lenders	17*	(10)	22	30	0	1877
Credit from Informal Lenders	8***	(3)	10	16	0	1877
Credit used for Agric. Activity	8***	(3)	4	9	0	1877
Credit used to Expand Business	10***	(3)	4	10	0	1877
Credit used to start New Business	2	(1)	2	3	0	1877

***, **, * indicate statistical significance at the 1%, 5%, and 10% confidence level, respectively.

Notes: The results are estimated coefficients for a regression of the stated outcome on a PSP dummy and the followingcontrols: age, age squared, gender, number of men, woman and children in the household, dummies for schooling i.e. some primary, primary completed, secondary, and tertiary with a baseline of no schooling. Standard errors are robust standard errors, and theyare clustered at the village level. All regressions are weighted.

Table 12: Household Credit Results

	Credit		Source			Purpose		
	Total	Business Owners	SILC	Formal	Informal	Agric. Activity	Expanding Business	Start New Business
PSP	29**	27***	5**	17*	8***	8***	10***	2
s.e.	(11)	(8)	(2)	(10)	(3)	(3)	(3)	(1)
FA mean	41	32	7	22	10	4	4	2
Sample mean	56	50	10	30	16	9	10	3
Median	11	15	0	0	0	0	0	0
Observations	1891	865	1891	1891	1891	1891	1891	1891

***, **, * indicate statistical significance at the 1%, 5%, and 10% confidence level, respectively.

Notes: The results are estimated coefficients for a regression of the stated outcome on a PSP dummy and the following controls: age, age squared, gender, number of men, woman and children in the household, dummies for schooling i.e. some primary, primary completed, secondary, and tertiary with a baseline of no schooling. Standard errors are robust standard errors, and theyare clustered at the village level. All regressions are weighted.

Table 13: Household Productive Decisions Results

	PSP	s.e.	FA mean	Sample mean	Median	Obs.
Start New Business	0.05	(0.06)	0.2	0.24	0	1891
Business Investment	20***	(6)	22	35	0	1891
Hours spent in Business	3**	(2)	9	12	0	1891
Non-HH Employees	0.12**	(0.05)	0.11	0.19	0	1891
Hours spent in Employee	0.97	(2)	14	15	10	1891
Agric. Investment	4	(9)	67	69	28	1891
Hours spent in Agric.	-3*	(2)	31	29	30	1891

***, **, * indicate statistical significance at the 1%, 5%, and 10% confidence level, respectively.

Notes: The results are estimated coefficients for a regression of the stated outcome on a PSP dummy and the following controls: age, age squared, gender, number of men, woman and children in the household, dummies for schooling i.e. some primary, primary completed, secondary, and tertiary with a baseline of no schooling. Standard errors are robust standard errors, and theyare clustered at the village level. All regressions are weighted.

Table 13: Household Productive Decisions Results

	Start New Business	Business Investment	Hours spent in Business	Employees (non-HH)	Hours spent as Employee	Agric. Investment	Hours spent in Agric.
PSP	0.05	20***	3**	0.12**	0.97	4	-3*
s.e.	(0.06)	(6)	(2)	(0.05)	(2)	(9)	(2)
FA mean	0.2	22	9	0.11	14	67	31
Sample mean	0.24	35	12	0.19	15	69	29
Median	0	0	0	0	10	28	30
Observations	1891	1891	1891	1891	1891	1891	1891

***, **, * indicate statistical significance at the 1%, 5%, and 10% confidence level, respectively.

Notes: The results are estimated coefficients for a regression of the stated outcome on a PSP dummy and the following controls: age, age squared, gender, number of men, woman and children in the household, dummies for schooling i.e. some primary, primary completed, secondary, and tertiary with a baseline of no schooling. Standard errors are robust standard errors, and theyare clustered at the village level. All regressions are weighted.

Table 14: Household Income Results

	PSP	s.e.	FA mean	Sample mean	Median	Obs.
Total Income	131	(85)	358	451	196	1891
Business Income	11	(12)	54	62	0	1891
Total Expenditure	208*	(113)	1598	1717	1394	1891
Total Consumption	184*	(111)	1561	1664	1356	1891

***, **, * indicate statistical significance at the 1%, 5%, and 10% confidence level, respectively.

Notes: The results are estimated coefficients for a regression of the stated outcome on a PSP dummy and the following controls: age, age squared, gender, number of men, woman and children in the household, dummies for schooling i.e. some primary, primary completed, secondary, and tertiary with a baseline of no schooling. Standard errors are robust standard errors, and theyare clustered at the village level. All regressions are weighted.

Table 14: Household Income Results

	Total Income	Business Income	Total Expenditures	Total Consumption
PSP	131	11	208*	184*
s.e.	(85)	(12)	(113)	(111)
FA mean	358	54	1598	1561
Sample mean	451	62	1717	1664
Median	196	0	1394	1356
Observations	1891	1891	1891	1891

***, **, * indicate statistical significance at the 1%, 5%, and 10% confidence level, respectively.

Notes: The results are estimated coefficients for a regression of the stated outcome on a PSP dummy and the following controls: age, age squared, gender, number of men, woman and children in the household, dummies for schooling i.e. some primary, primary completed, secondary, and tertiary with a baseline of no schooling. Standard errors are robust standard errors, and theyare clustered at the village level. All regressions are weighted.

Table 15: Endline Membership Selection on Baseline Characteristics

	Inc.	Pos. Inc.	Bus. Inc.	Pos. Bus. Inc.	Cons.	Pos. Cons.	Sav.	Pos. Sav.	Hrs. in Bus.	Pos. Hrs. in Bus.	β	δ
Outcome	5e-06	-0.06	-2e-06	0.05	9e-06	-0.39***	0.0001*	-0.005	0.0005	0.01	-0.12*	-0.06
s.e.	(3e-06)	(0.11)	(0.0001)	(0.06)	(2e-06)	(0.06)	(6e-06)	(0.09)	(0.001)	(0.06)	(0.07)	(0.05)
PSP*outcome	0.0002***	-0.02	0.0003*	0.02	-1e-06	0.32	-3e-06	0.23**	0.002	0.12*	0.07	0.17***
s.e.	(6e-06)	(0.17)	(0.0002)	(0.07)	(2e-06)	(0.28)	(7e-06)	(1)	(0.002)	(0.07)	(0.9)	(0.06)
PSP*stdv.	0.09***	-0.003	0.05*	0.02	-0.02	0.16	-0.009	0.08**	0.04	0.06*	0.03	0.09***
Observations	1877	1877	1877	1877	1877	1877	1877	1877	1877	1877	1877	1877

***, **, * indicate statistical significance at the 1%, 5%, and 10% confidence level, respectively.

Notes: The results are estimated coefficients for a regression of the stated outcome on a PSP dummy for all households that ended up in a SILC group. Standard errors are robust standard errors, and the yare clustered at the village level. All regressions are weighted and include village fixed effects.

Table 16: Agent Effort - Distance Travelled to Group

	Within Village	1-5 km	5-10 km	10-20 km	20+ km
All Quarters	0.05*	-0.06*	0	0	0.02
	(0.03)	(0.04)	(0.04)	(0.03)	(0.01)
Quarter 1	(0.12)***	(-0.01)	(-0.05)	(-0.05)	(-0.01)
	.04	.05	.05	.04	.01
Quarter 2	0.08*	-0.07	0.01	-0.04	0.03
	(0.05)	(0.04)	(0.06)	(0.04)	(0.02)
Quarter 3	0.02	-0.05	-0.01	0.05	-0.01
	(0.04)	(0.06)	(0.06)	(0.05)	(0.01)
Quarter 4	-0.03	-0.12*	0.06	0.04	0.06*
	(0.04)	(0.07)	(0.08)	(0.06)	(0.03)

Table 17: Effect of "Village Type" on Total Outcomes

	Members	Groups	Savings	Loans	Loan Value	Profit
No Fee	-4	0	-64	-2	-45	5
	(5)	(0)	(100)	(3)	(112)	(9)
Uniform Fee	-7	-1	4	0	41	-9
	(4)	(0)	(84)	(2)	(97)	(8)
Variable Fee	37***	2***	969***	28***	1020***	47***
	(7)	(0)	(197)	(4)	(219)	(10)
Observations	933	933	933	933	933	933
ControlMean	52	3	850	27	820	38

Table 18: Effect of "Village Type" on Per Group Village Outcomes

	Members	Savings	Loans	Loan Value	Profit
No Fee	3***	20	2***	39	9***
	(1)	(28)	(1)	(33)	(2)
Uniform Fee	7***	239***	7***	283***	10***
	(1)	(30)	(1)	(36)	(2)
Variable Fee	5***	141***	4***	150***	8***
	(1)	(28)	(1)	(34)	(2)
Observations	933	933	933	933	933
Control Mean	17	260	8	220	15