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A Modified Household Economic Portfolio Model for Assessing Impact of Microfinance Using Diaries

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Impact Evaluation: Quantitative VS Qualitative

- The Quantitative Evaluations need to solve the attribution problem
- The Qualitative Evaluations look at the process

Quantitative Question

Is there "statistically" an impact of MF or not?

Qualitative Question

How the intervention of MF could have led to the observed impact?



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Quantitative Impact Evaluation

Karlan (2011), in the Handbook of Microfinance

Problems

Money is fungible
by nature.

There are no
formal records of
informal income.

Solutions

Continues
monitoring.

Focus on
consumption and
its smoothening.

Methods

Frequent
observations.

Flexible
surveys.

But it remains expensive



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OVERCOMING THE FUNGIBILITY PROBLEM



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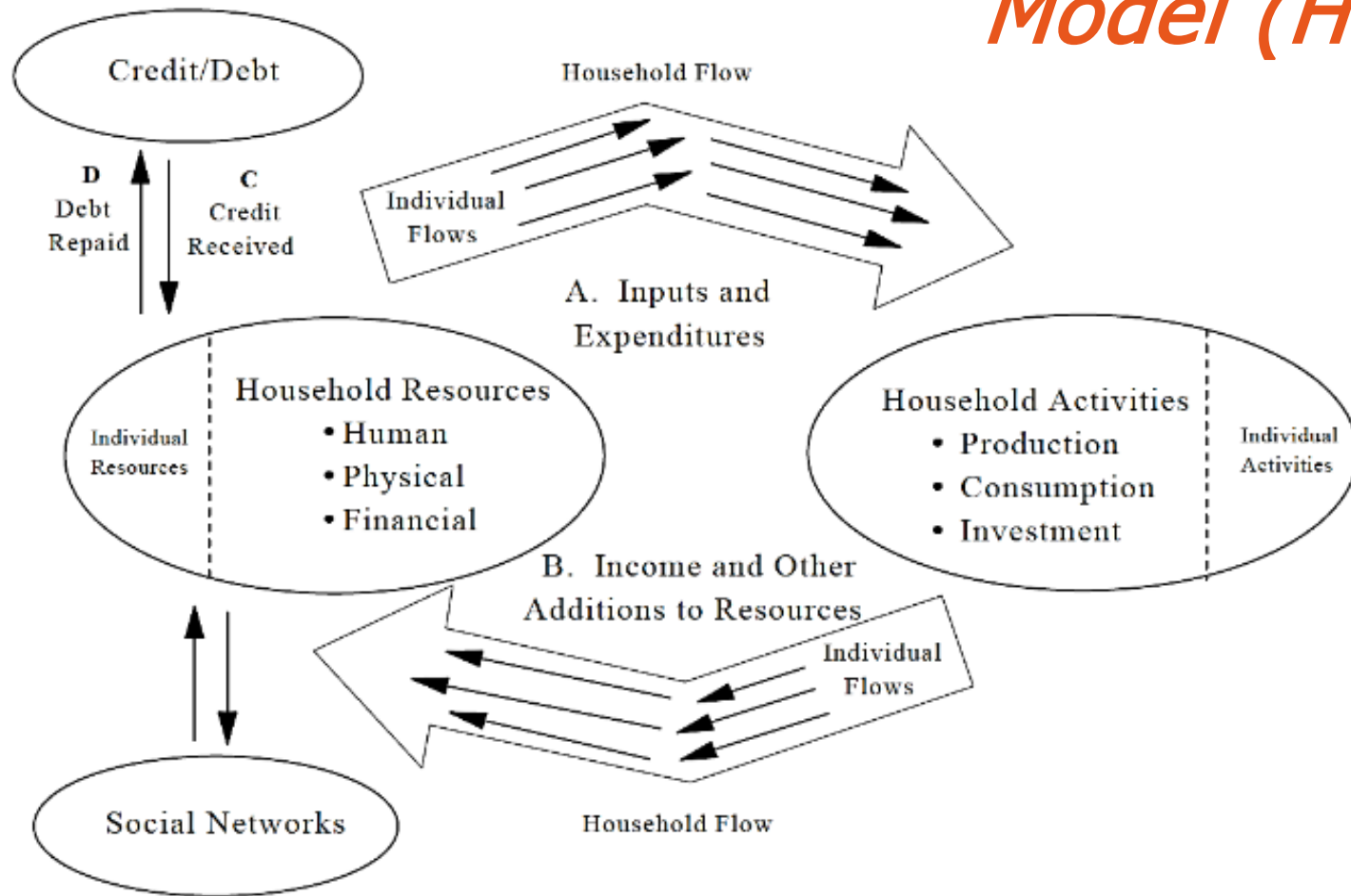
The Household Economic Portfolio Model (HEP)

- The (HEP) model of Chen and Dunn (1996) is highly interesting as it overcomes the fungibility problem. The HEP was published in 1996 as a theoretical conceptual model in a desk study by (USAID).
- Since its creation, the HEP has been cited in many studies (Hulme, 1997, 2000; Jacobsen, 2006; Gobezie, 2007; Al-Mamun, 2010, 2011).
- The HEP suffers from some limitations that make the implementation of it quite complex.

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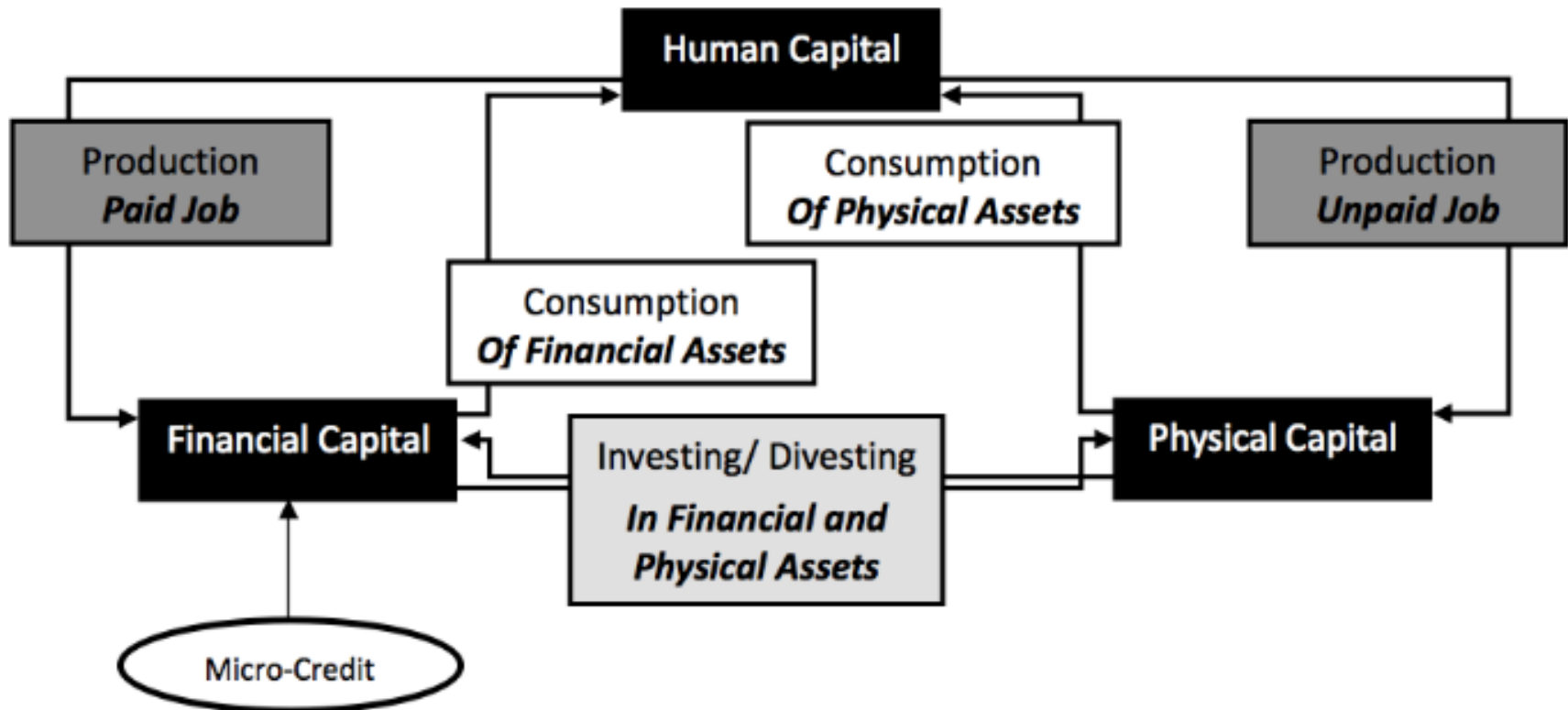
The Household Economic Portfolio Model (HEP)



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The Modified Household Economic Portfolio Model (M-HEP)





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OVERCOMING THE PROBLEM OF ABSENCE OF FORMAL RECORDS

Diaries = daily record
Diaries (from latin dies = day)
Journal (From French jour =day)



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Financial diaries in microfinance research

- Used for the first time in 1999-2000 (Rutherford, 2002).
- Used in a lot of recent work (Rutherford, 2002; Collins, 2008; Collins et. al., 2009; Gammage, 2010).
- Focused on financial transactions of the poor
- Despite the influential insights produced by the financial diaries, these diaries alone are not enough for constructing complete portfolios.
- Non-economic activities and leisure are also part of the total welfare (Juster & Stafford, 1991; Merz/Rathjen 2009).
- Intrahouseholds relations not show in the diaries (Hudon, 2010). In-kind transactions not shown (Vincent & Cull, 2011).



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Time-use diaries in microfinance research..?

Time-Use Diaries

- Since the late 1970s, a lot of work has been done on researching the time-allocation behavior in developing countries especially for women.
- Very few studies in microfinance have researched the time allocation of the clients (Pitt, 2000; Mahmud, 2003; Garikipati, 2008).



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COMBINING THE FINANCIAL AND TIME DIARIES



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Case Studies in Cairo

2013/08/06 الثلاثاء: اليوم

All figures in hours	16-Jul	17-Jul	18-Jul	19-Jul	20-Jul	21-Jul	22-Jul	23-Jul	24-Jul
Description of activity									
Sleeping	8,0	6,0	5,5	8,0	6,5	6,5	12,0	8,5	6,0
Preparing food		1,0	3,0		3,0	0,5			
Eating	1,0	1,0	1,0	1,5	1,0	1,0	1,0	1,0	1,0
Resting									
Waking, idling in bed	0,5	0,5				0,5			
Shopping		1,0	1,0	0,5					
Working			3,0						
Meeting the researcher								1,0	
Watching TV	9,5	6,0	9,0	7,5	10,5	15,5	6,0	9,0	9,5
Going to the doctor			1,5						
Cleaning		1,0		4,0					
Meeting friends in street	2,5						5,0	3,0	1,0
Visiting relatives	1,5	7,5		2,5	1,0				
playing with grandchildren					1,0			1,5	2,5
Time with the family					1,0				4,0
Receiving guests	1,0								
	24,0	24,0	24,0	24,0	24,0	24,0	24,0	24,0	24,0
Inflow (EGP)	70,00	44,50	36,00	45,00	0,00	35,00	47,50	65,00	10,00
Outflow (EGP)	52,00	62,50	60,50	54,25	18,75	32,00	8,00	73,00	68,50
On credit (EGP)			25,75	10,00	18,75				22
Balance (EGP)	18,00	0,00	1,25	2,00	2,00	5,00	44,50	36,50	0,00

- We have collected financial and a time-use diaries from a sample of poor women in Egypt in August 2013.
- Each diarist kept both diaries for 14 days in Arabic.
- These non-stylized diaries were then entered into an excel sheet, which then constituted our database.



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Findings from the combined diary of Mabrouka

- Mabrouka had no money and very little or no financial activity on August 8 to August 11. On these three days she slept a lot (Aug 8, 9 and 10).
- She cleaned a lot on August 8 and 9, prepared a lot of food on August 10 and watched a lot TV on August 11. All of these, except for the TV are unpaid jobs.
- There seems to be a correspondence between



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Findings from the combined diary of Mabrouka

- By keeping the house clean (unpaid job), she is trying to maintain the value of her physical capital. By spending around 9% of her time on the unpaid job of preparing food (which amounts to 40% if we include the grocery shopping activity), and by spending on food 74% out of her total expenditure, she maintains her human capital.
- In addition, as we can see from the time-use diary, by meeting people on the streets and in their homes, Mabrouka is retaining her human capital (network) and by watching TV she is adding to her total education and remaining informed.



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Limitations

- Costly approach, thus only the head of the household was studied in our case.
- Diary data analysis is not easy, but provides rich information as our case study shows.
- Moreover, the use of non-stylized diaries:
 - Will lead to a high coding cost for the different activities, again confirmed by our case study.
 - Also, some respondents become too general and therefore become uninteresting.
 - Comparability issues.



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Conclusion

***The use of
combined
financial and
time diaries
contribute to:***

- Developing impact evaluation tools in microfinance.
- The poor, as well, are expected to benefit from the diary tools that make them better aware of their economic behaviors.
- Donors and socially responsible investors would be interested in outcomes of the M-HEP that could help for better understanding the process of creating impact in microfinance.



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Thank You

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