## Urban Dibao: Targeting and Effect

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## **Outlines:**

- Does the urban dibao program really help the urban poor to escape from poverty?
- How efficient is the targeting of the urban dibao program?
- What are the factors influence on the efficiency of dibao targeting?

## Data in analysis

- China's Urban Employment and Social Protection Survey 2009.
- The cities include Shanghai, Wuhan, Shenyang, Fuzhou, Xian and Guangzhou.

I Does the urban dibao program really help the urban poor to escape from poverty?

## **Dibao standerds**

- Dibao Household: per capita household income falls below a locally determined minimum living standard can enjoy this assistance
- Dibao Income of a Household= household size × (per capita household income - dibao standard)

#### Table 1 Characteristics of *Dibao* in Six Cities

City	Household Number	<i>Dibao</i> Number	Coverage Rate in Sample (%)	<i>Dibao</i> Standards in Survey Date
Total	4273	121	2.83	—
Shanghai	700	16	2.29	450
Wuhan	700	46	6.57	360
Shenyang	716	11	1.54	340
Fuzhou	728	4	0.55	290
Xi'an	729	35	4.80	260
Guangzhou	700	9	1.29	398

#### Table2. Poverty Rate before and after *dibao* program by Household Level (%)

City	Poverty Rate Before <i>dibao</i> Program	Poverty Rate After <i>dibao</i> Program
Shanghai	3.57	3.12
Wuhan	5.41	3.83
Shenyang	8.26	8.14
Fuzhou	9.60	9.27
Xi'an	4.58	3.71
Guangzhou	5.75	5.46
Total	5.38	4.79

#### Table3. Poverty Rate before and after *dibao* program by Individual Level (%)

City	Poverty Rate Before <i>dibao</i> Program	Poverty Rate After <i>dibao</i> Program
Shanghai	3.59	3.20
Wuhan	5.40	3.60
Shenyang	8.40	8.32
Fuzhou	8.54	8.33
Xi'an	4.29	3.54
Guangzhou	4.81	4.58
Total	5.17	4.59

## II Targeting Outcomes of Dibao Program

## Error Of Target: "Who is poor"

- Error of Exclusion: mistakenly identify poor people as nonpoor, and thus deny them access to the program.
- Error of Inclusion: mistakenly identify nonpoor peoples as poor, and therefore admit them to the program.

#### Table 5 Targeting Outcomes of Dibao Program

	Poor Households	Non-poor households	Total
Have dibao	Success	Inclusion error (Error 2)	
	54	67	121
Have no dibao	Exclusion error (Error 1)	Success	
	211	3941	4152
Total	265	4008	4273

"Success rate"	= (54+3941)/4273×100=93.49%		
"Error rate"	= (211+67)/4273×100=6.5	1%	
"Undercoverage	" = 211/265×100=79.62%	Error1	
"Leakage"	= 67/121×100=55.37%	Error2	

# III The Factors Influence on the Efficiency of dibao Targeting

### **Multinomial Logit Model:**

 $L_1 = X'b + e$  $L_2 = X'b + e$ 

## L<sub>1,2</sub>=1 if targeting is not correct, include error1 and error2; L=0 if targeting is correct

## Variable X includes:

- (1)Per Capita Income
- (2) Basic Human Capital Characteristics
- (3) Employment Status
- (4) Demographic Compositions
- (5)Healthy condition
- (6)Living Standards

#### Table 9 Mistargeting Analysis: Based on MLM Analysis(I)

Variable	Туре1		Туре2	
	Coef.	Z Value	Coef.	Z Value
Constant	1.758*	1.720	-1.539*	-2.560
Original per Income	- 0.008***	-8.560	- 0.001***	-5.550
Household size	0.012	0.110	0.177	1.490
Household head educational years	0.020	0.710	- 0.010	-0.410
Partner's educational years	- 0.006	-0.190	- 0.004	-0.240
Proportion of employed	0.010	0.020	0.015	0.050
Proportion of unemployed	0.428	0.680	- 1.344	-1.380
Proportion of age 0-15	- 0.487	-0.670	- 0.209	-0.450
Proportion of women 55+	- 0.386	-0.580	- 0.919*	-2.020
Proportion of men 60+	0.725	1.010	1.284***	2.610

#### Table 9 Mistargeting Analysis: Based on MLM Analysis(II)

Dependent Variable	Туре1		Туре2	
Valiable	Coef.	Z Value	Coef.	Z Value
Healthy	0.171*	1.830	- 0.229***	-2.920
Household head's brothers and sisters	0.092	1.460	- 0.048	-1.060
Partner's brothers and sisters	- 0.010	-0.140	- 0.012	-0.250
Per living area	0.007**	2.200	- 0.019**	-2.370
Toilet (1=Yes; 0=Not)	0.837*	1.740	- 0.243	-1.110
Gas tubing (1=Yes; 0=Not)	0.056	0.250	- 0.038	-0.250
House property right (1=Yes; 0=Not)	- 0.403*	-1.890	- 0.307*	-1.810
Durable commodity (1=Yes; 0=Not)	- 0.147	-0.460	- 0.086	-0.230
Fit up house (1=Yes; 0=Not)	- 0.364	-0.960	- 4.917***	-19.610
City dummy	Yes	Yes	Yes	Yes
Observations	3315			
Probability>chi2	0.000		0.0009	

## Conclusion

- (1) *dibao* program has limited effects on alleviating poverty in China;
- (2) Undercoverage Rate and Leakage Rate are higher than CULS2.
- (3) Healthy condition and living condition of a household are the factors affecting dibao targeting.

## Thanks!