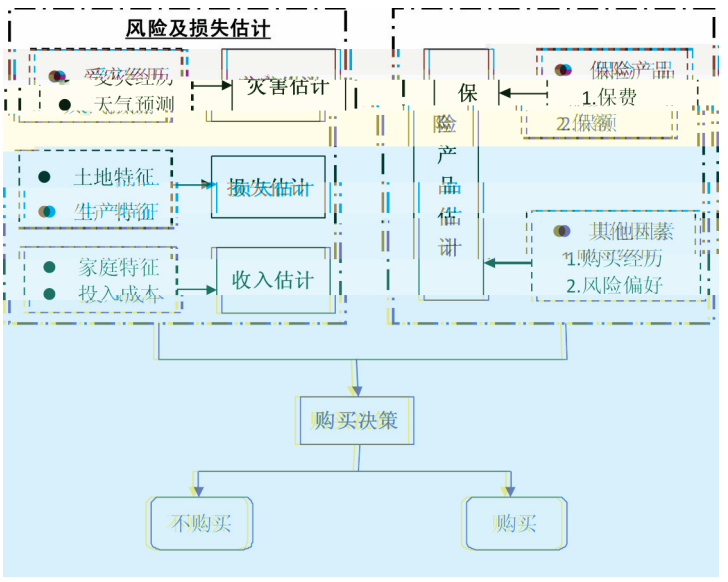
2007

100081
100081
100081

2013
20
Smith and Watts 2009
2007
2004 3.77 2013 306.7 2013
42%
2013 3

“ ” 71373264
nycytx-02 ASTIP-IAED03 “
” 0052014004-3 14 “ ”


风险及损失估计
受灾经历
天气预测
灾害估计
土地特征
生产特征
损失估计
家庭特征
投入成本
收入估计
保险产品估计
保险产品
1.保费
2.保额
其他因素
1.购买经历
2.风险偏好
购买决策
不购买
购买

y* [0 +∞) X

$$\begin{cases} y^* = \beta X + \varepsilon \\ y = 1 \qquad y^* \geq 0 \end{cases}$$

y*

ε 0

Prob(y=1|x)=Prob(y*≥0|x)=Prob(ε≥-βX|x)=1-G -βX

ε 0

Prob(y=1|x)= G βX

G · ε ε Logistic

$$Prob(y=1|x)=G\ \beta X\ = \frac{\exp(\beta X)}{1+\exp(\beta X)}$$

Logit X

y

1.

2009 2011

2

2 8 2009

2011 641 576

Stata12.0

306

2270

2.

„ Ä ’

2013

	A		B	
1	20	20	15	25
2	20	20	10	30
3	20	20	10	40
4	20	20	5	45
5	20	20	0	50

5

A B

1

8

4 4

5

5

B

0 1

1

	1= 0=	0.34	0.47	0	1
	/	283.86	124.21	22.94	1460
		20.84	22.15	0.3	150
	1= 0=	0.43	0.50	0	1
	1= 0=	0.43	0.49	0	1
	1= 0=	0.32	0.47	0	1
	1= 0=	0.16	0.37	0	1
		101.64	1670.13	0	40000
	1= 0=	0.34	0.47	0	1
		13.69	4.55	8	20
		218.49	79.98	145	400
		50.85	10.12	23	85
		8.48	40.20	0	15
	1= 0=	0.99	0.12	0	1
		29.75	11.96	0	61
	-	0.02	0.29	-0.31	0.69

	1= 0=	0.32	0.47	0	1
	1= 2= 3=	1.86	0.69	1	3
	1= 0=	0.56	0.50	0	2
		1.86	2.47	0	47
	1= 2= 3=	1.85	0.39	1	3
		6.27	13.74	0.05	450
	1= 0=	0.29	0.45	0	1
	1= 0=	0.52	0.50	0	1

3.

1.

4 Haus

man

5

			P	
		Chi2=7.04	0.2180	
		Chi2=8.08	0.0045	

Smith,Goodwin,1996;

2006 ,

4 Hausman

Maddala

1983

Efron (1987) Bootstrap

5

	0.00092	0.20288
	(0.00133)	(0.08402)
	1.55727	20.83016
	(0.32867)	(8.10195)
	0.02298	0.24575
	(0.00399)	(0.09412)
	-0.25723	0.19791
	(0.39301)	(0.43475)
	-1.19587	-2.31361
	(0.63940)	(0.83125)
	-0.00056	-0.00184
	(0.00753)	(0.00739)
	0.02054	0.37430
	(0.00875)	(0.14819)
	3.70021	8.86262
	(0.55043)	(2.43709)
	0.52025	0.41956
	(0.59266)	(0.64453)
	-0.00778	-3.39589
	(0.41974)	(1.49280)
	0.03393	0.55426
	(0.02658)	(0.22886)
	0.00588	0.98625
	(0.06680)	(0.41364)
	-0.03927	-0.11065
	(0.02270)	(0.04528)
	-13.33911	-212.25890
	(2.36629)	(83.71647)

· ·· ··· 10% 5% 1%

2.

6 1

2

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3

	1	2	3
	0.0384	-0.0325	0.0313
	0.0672	0.1098	0.0673
	-0.4742	0.1695	-0.4166
	0.0971	0.1548	0.0996
	-0.0011	-0.0147	-0.0161
	0.0169	0.0420	0.0181
	0.2801	0.1721	0.3406
	0.1356	0.2200	0.1374
	-0.3193	-0.3516	-0.3020
	0.4454	0.3052	0.4412
		0.0088	0.0046
		0.0075	0.0031
		0.2632	0.3587
		0.1464	0.0947
		4.3026	
		0.1530	
	-0.7769	-2.6280	-1.0388
	0.1944	0.3535	0.2077

* ** ***

10% 5% 1%

82.42%

1

2

3

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1. 2013 3

2. -

2010 10

3. - 342

2011 11

4. -

2006 10

5. Efron,B.“ Better Bootstrap Confidence Intervals and Bootstrap Approximations ”, Journalof the American Statistical As sociation, 1987, 1: 171-185.

6. Goodwin, B.K.“ An Empirical Analysis of the Demand for Crop Insurance ”, American Journal of Agricultural Econom ics, 1993, 75:425-434.

7. Goodwin, B.K. and Kastens, T.L.“ Adverse Selection,Disaster Relief and the Demand for Multiple Peril Crop Insur ance ”, Contract Report for the Federal Crop Insurance Corporation,May 1993.

8. Hill, R.V., Hoddinott, J. and Kumar, N.“ Adoption of weather-index insurance: Learning from Willingness to Pay among a Panel of Households inRural Ethiopia, International Food Policy Research Institute, 2011.

9. KaiyuLyu and Thomas Barre.“ Willingness-to-pay for crop insurance in China ”, Working Paper, 2013.

10. Kwadzo, G.T-M., Kuwornu, J.K.M. andAmadu, I.S.B.“ Food Crop Farmers ’ Willingness to Participate inMarket-Based Crop Insurance Scheme: Evidence fromGhana ”, Research in Applied Economics, 2013, 1:1-21.

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