

The China Agriculture Policy Insurance Pilot Program: the gap between design and implementation

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Outline

- **Overview** on the government-subsidized crop insurance programs
- **The designed structure** of the China Agriculture Policy Insurance Pilot Program (CAPIP)
- Major findings on the **implementation** of CAPIP in the field
- Conclusion and discussion

Overview

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Overview

The government-sponsored insurance program, besides government-operated public insurance programs, are designed to provide disaster aid and assistance to crop cultivating households.

It is expected to cope with the failure of private provision of crop disaster insurance, assuming that there is good elasticity between the subsidy ratio and participation rate.

It has a long history. Since the 1938 Federal Crop Insurance Act, the United States initiated the government subsidized crop insurance program. Now this scheme is widely adopted in a lot of countries. Japan is also among the earliest adopters of this scheme with a program started in 1939.

Overview

- According to *Ibarra and Skees (2007)* , common features of government-subsidized crop insurance programs are:
 - Mixing both social and market-based goals.
 - Core products that involve insurance at the farm level for multiple perils.
 - Government subsidies that are linked to premiums on a percentage basis.
 - Government subsidies or government agencies for the administrative cost of the program.
 - A major role for government in pooling and holding some of the most catastrophic risk.

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The designed structure of CAPIP

Purposes of the CAPIP

- The Chinese Central Government decides to run the CAPIP as an important component of the countryside-agriculture-farmer (農村、農業、農民, 三農) supporting system.
- The agriculture disaster insurances expected to
 - Reduce the variability of farmers' income
 - Give incentives for farmers to stay on their lands
 - As a legal and exempted agriculture subsidy approach under the framework of the WTO Agreement on Agriculture
- The “Policy Insurance” is a Chinese phrase, “政策保險”, as a contrast to “commercial” insurance, due to the involvement of the government.

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The China Agriculture Policy Insurance Program

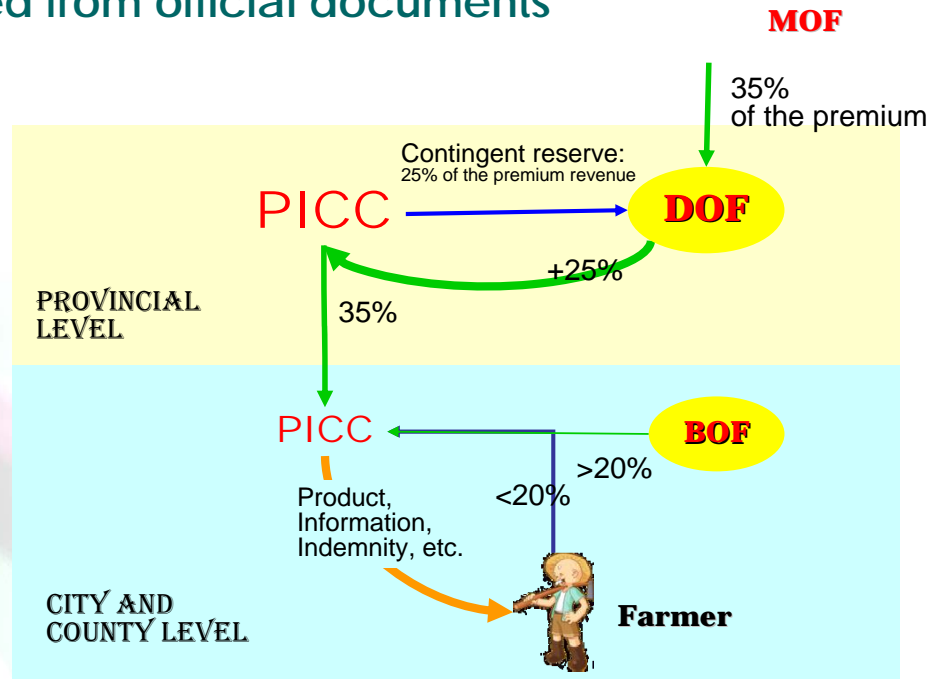


Budget = 1 Billion RMB Yuan (Aprox. 15 Billion Yen)

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Designed operational structure derived from official documents



Designed operational structure of the CAPIP (2008) taking PICC Hunan Branch as an example

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Implementation of the CAPIP

The CAPIP in 2007 in documents

- Issues in common are highlighted as
 - **Multi-peril insurance lines** for crop plantations against rainstorm, flood, inundation, strong wind, hail, frost, and drought.
 - **Premium rates**: differ from 3% to 10% according to region, crops, and perils.
 - **Low coverage**: The insurance contract only covers the physical cost of crops. Costs in labor forces are excluded.
 - **Government subsidy**: the central government and provincial government subsidize about 50% of the premium while city and county governments subsidize around 10~30%. Policyholders will pay the rest of premium.
 - **Catastrophic reserve**: provincial governments extract catastrophic reserve from annual business surplus of agriculture disaster insurance lines. Provincial branches of insurance companies can apply for the use of the liquid capital when catastrophic disaster hits.

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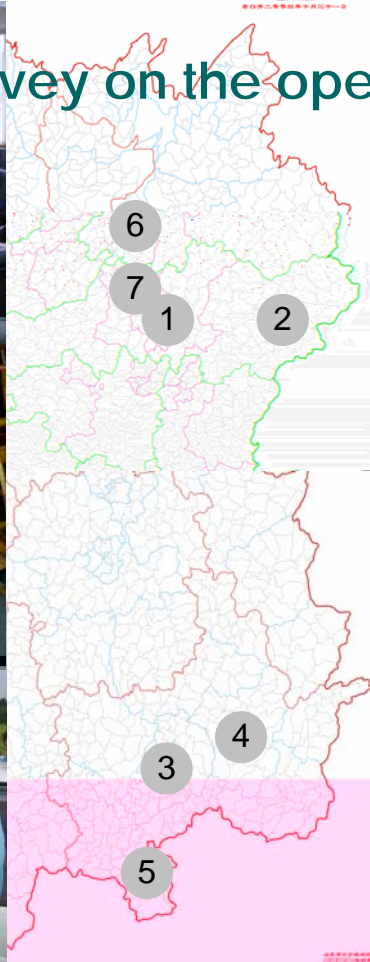
The CAPIP in 2007 in documents (ctd.)

Provinces	Hunan	Jilin	Inner Mogolia	Xinjiang	Sichuan	Jiangsu	
Insured crops	rice and cotton	corn, rice, soybean, tobacco, et al.	corn, rice, and soybean	cotton, corn, rice, soybean and wheat	rice and corn	rice, wheat, cotton, cole and corn	
Perils	rainstorm, flood, inundation, wind, hail, frost, and drought			-	rainstorm, flood, inundation, wind, hail, frost, and drought		
Liability (CNY/mu /season) and premium rate (%)	Rice: 240 (basic 5%, drought 3%, all 7%) Cotton: 300 (8%)	Corn: 200 (10%) Rice: 266.7 (8%) Soybean: 166.7 (8%)	Corn: 230 (10%) Wheat: 300(8%) Soybean: 170 (8%)	Cotton: 400(7%)	-	discriminated premium rate according to risk mapping.	
Subsidy rate	Central		25%	25%	25%	-	
	Provincial	50%	25%	50%	25%	25%	
	Local	>=10%	30%	10%	-	20%	
	In total	>=60%	80%	85%	>=50%	70%	>= 60%
Summary of 2007	Premium (CNY)	750 million	-	-	760 million	74 million	450 million
	Indemnity (CNY)	440 million	-	-	-	19 million	150 million

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Field survey on the operation of CAPIP



- 1 Changsha (长沙)
- 2 Liuyang (浏阳)
- 3 Chenzhou (郴州)
- 4 Zixing (资兴)
- 5 Yizhang (宜章)
- 6 Xiangyin (湘阴)
- 7 Wangcheng (望城)

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Major stakeholders involved

The Central Government

Provincial Government

City/ County Government

PICC provincial

PICC county

Local heads



Farmers



Motivations and roles

Stakeholder	Objective(s)	Role
Central government (represented by the Ministry of Finance)	Social welfare maximization; rural development; providing disaster aid to farmers; stabilize foodstuff production; ...	Program initiation; policy-making or legislation; providing financial resources; ...
Provincial government (represented by the Department of Finance)	Implementation of the policy; rural development; providing disaster aid to farmers; stabilize foodstuff production; ...	Specify the operation details of the program; inspecting the operation of the program; providing financial resources; ...
City/ county government	Socioeconomic development; infrastructure investment; tax revenue maximization; ...	Providing financial resources; help insurance company branches to carry out the program; ...

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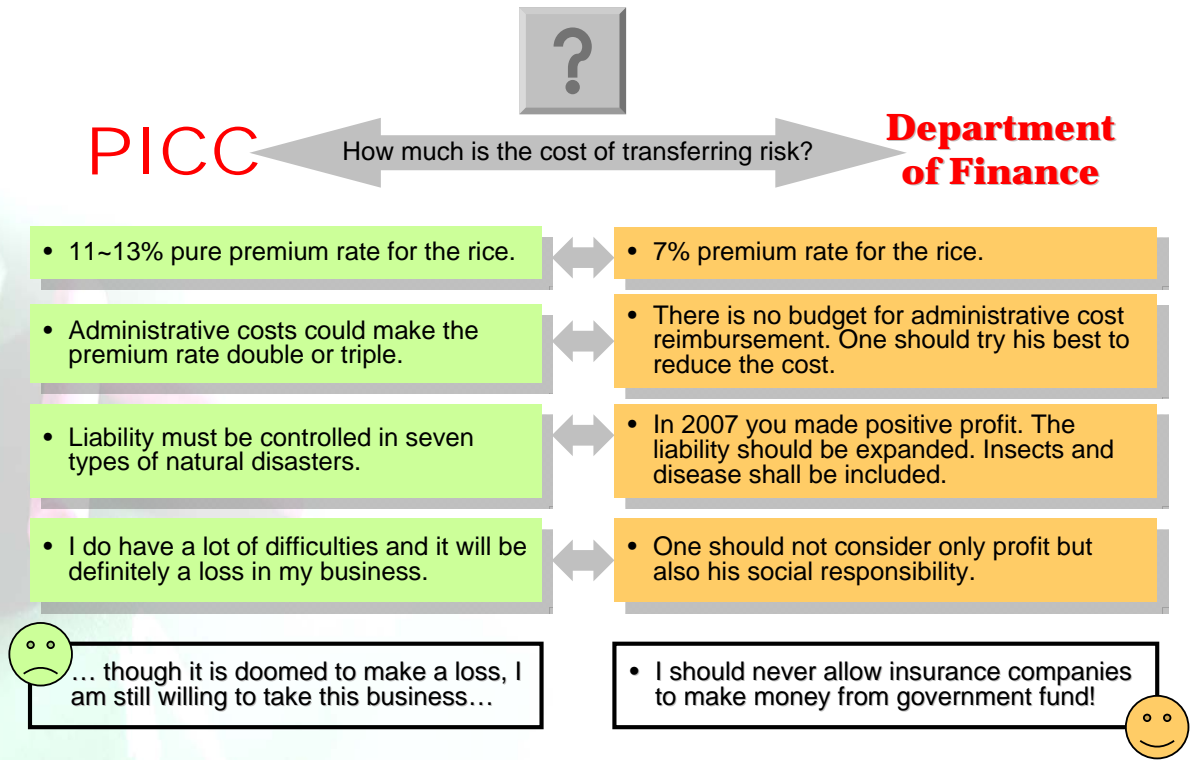
Motivations and roles (ctd...)

Stakeholder	Objective(s)	Role
Provincial branch of insurance companies	Profit maximization (in the long run); partially concerned about social responsibility; occupying the rural insurance market through crop insurance; cumulating political resources and power; ...	Designing insurance lines; pool the risk;
Local branches of insurance companies	Profit maximization (in the short run); ...	Implementation: delivering insurance lines; underwriting; inspection and indemnity; ...
Farmers	Profit maximization; ...	Producing and risk management

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Problem 1: Market-oriented?



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Problem 2: individual or group insurance? voluntary or compulsory insurance?

The Central Government

- The insurance must be purchased voluntarily, either in a group based way or individually based way.
- Provinces must guarantee insured areas of crop land to be qualified for pilot programs.

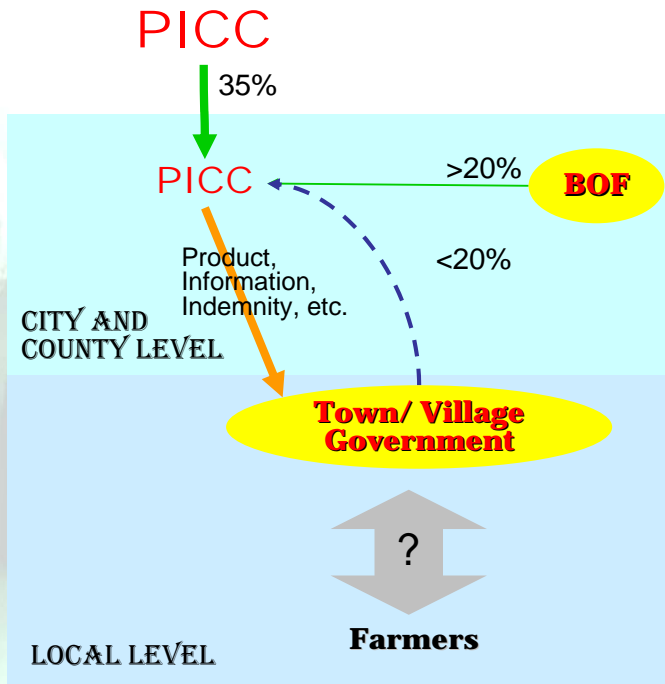


	Voluntarily based?	Individually based?
County government	It is almost impossible to reach the target insured area assigned by the provincial government.	For sure, it is easier to allocate target area to towns, and then villages.
Insurance company	There would be huge amount of cost in marketing and advertising, and the result is not desirable.	The administrative cost of collecting premiums household by household is tremendously high. Meanwhile, it is also very costly to indemnify farmers household by household.

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Actual operational structure at the local level



- Local governments becomes the policyholder instead of farmers, who become purely the insureds on the contract.
- Administrative costs are transferred to local governments.
- Farmers might be excluded from the system, without any information or cash flow.

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Problem 2: voluntary or compulsory insurance? individual or group insurance?

种植业保险保险单(抄件)
No. 保险单号: PHAN20084301810000002

鉴于投保人已向本保险人投保水稻种植保险, 并按本保险合同约定交付保险费, 保险人同意按照《水稻种植保险条款》约定承担保险责任, 特立本保险单为凭。

policyholder	投保人	浏阳市人民政府荷花街道办事处											
	被保险人	浏阳市荷花街道办事处陈绍发等12214户											
Insured	联系地址	浏阳市荷花街道办事处	邮编										
	联系电话		组织机构代码/身份证号										
	投保方式		投保户数	12214户									
按何种方式确定保险金额 参照生产成本确定													
	保险标的物	单位	保数	险量	单位生产成本(元)	单位保险产量(公斤)	约定单价(元/公斤)	单位保险金额(元)	保险金额(元)	每次事故免赔额/率	保险费率(%)	保险费(元)	
	中稻	亩	18404	0.00	0.00	0.00	240.00	4416960.00	0.00	0.00%	7.00	309187.20	
	晚稻	亩	5000.0	0.00	0.00	0.00	240.00	1200000.00	0.00	0.00%	7.00	84000.00	
Insured crop fields	种植地点及方位	地点: 浏阳市荷花街道办事处 东经: _____ 至 _____ 北纬: _____ 至 _____											
	总保险金额	人民币(大写) 伍佰陆拾壹万陆仟玖佰陆拾元整 ¥5,616,960.00											
	总保险费	人民币(大写) 叁拾玖万叁仟壹佰捌拾柒元贰角整 ¥393,187.20											
Premium contribution	保险费构成	交付单位	中央财政	省财政	地、市财政	县(区)财政	农户	其它					
		补贴或交付比例(%)	35.00%	25.00%	10.00%	10.00%	20.00%	0.00%					
		补贴或交付金额(元)	137615.52	98296.80	39318.72	39318.72	78637.44	0.00					
	保险期间	6个月, 自2008年06月10日零时起至2008年11月30日二十四时止。											

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Problem 2: voluntary or compulsory insurance? individual or group insurance?

Statements from local insurance branch and farmers do not coincide.

In 2007, we spread 10 million information cards, 5.3 million posters and 7.5 million handouts around the province. The cost for marketing and advertising in the rural area is very high.

Farmers have very limited knowledge on insurance. They are not motivated to purchase any coverage even if we let them know every detail of the contract.

PICC

In 2007, **6** out of **24** visited farmers knew their rice was insured; **3** knew after they got indemnity from the insurance company; **15** had no idea about the insurance program.

In 2008, **9** out of **30** visited farmers knew their rice was insured; **21** had no idea about the insurance program.

15 out of **24** visited farmers are willing to pay **CNY 10** for a coverage of **CNY 500/mu** of the rice plantation cost; **6** are willing to pay **CNY 2~3** for a coverage of **CNY 240/mu**.



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Problem 3: inconsistent incentives

- The objectives of central and local governments is inconsistent.

The Central Government

It is of vital importance to support the rural development.

Crop insurance will create social benefit (positive externality) and thus the government is responsible to handle with the market failure.

Local governments

It has no contribution to local tax revenue, particularly the crop insurance.

Rich



Poor

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Problem 3: inconsistent incentives

- The incentives of insurance company branches at the province and county level are also different

PICC Hunan branch

The loss is an investment for future rural insurance markets. We must try to let farmers know this company and this brand.

The loss is also an investment for political resources. We would benefit from the government.

PICC Local branches

Typical profit maximizer and cost minimizer.

Not willing to run the program

Try to save administrative costs

Try to make profit, even risk illegally

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Conclusion and discussion



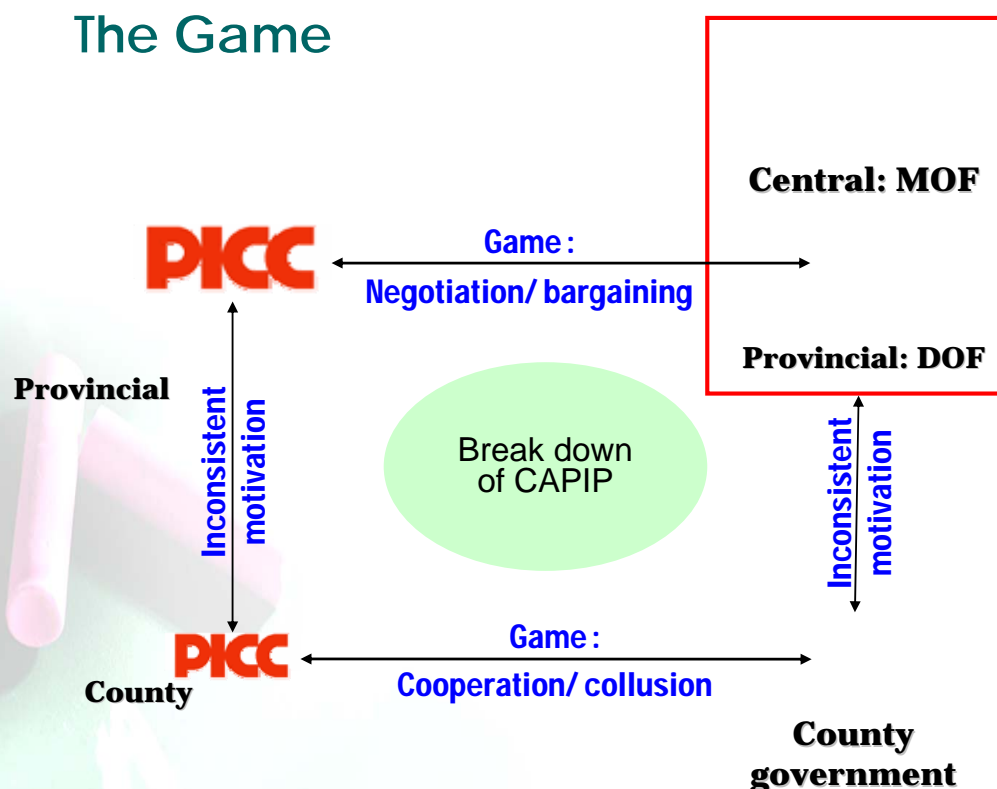
Conclusion and discussion

- The CAPIP is a well designed crop insurance program which learned a lot from existing subsidized crop insurance programs;
- The most meaningful aspect of the program is it teaches farming households the importance of insurance in their lives;
- Three out of four principles of the program, however, are violated in the implementation process;
- The present situation can be attributed to an equilibrium of mutually-connected games.

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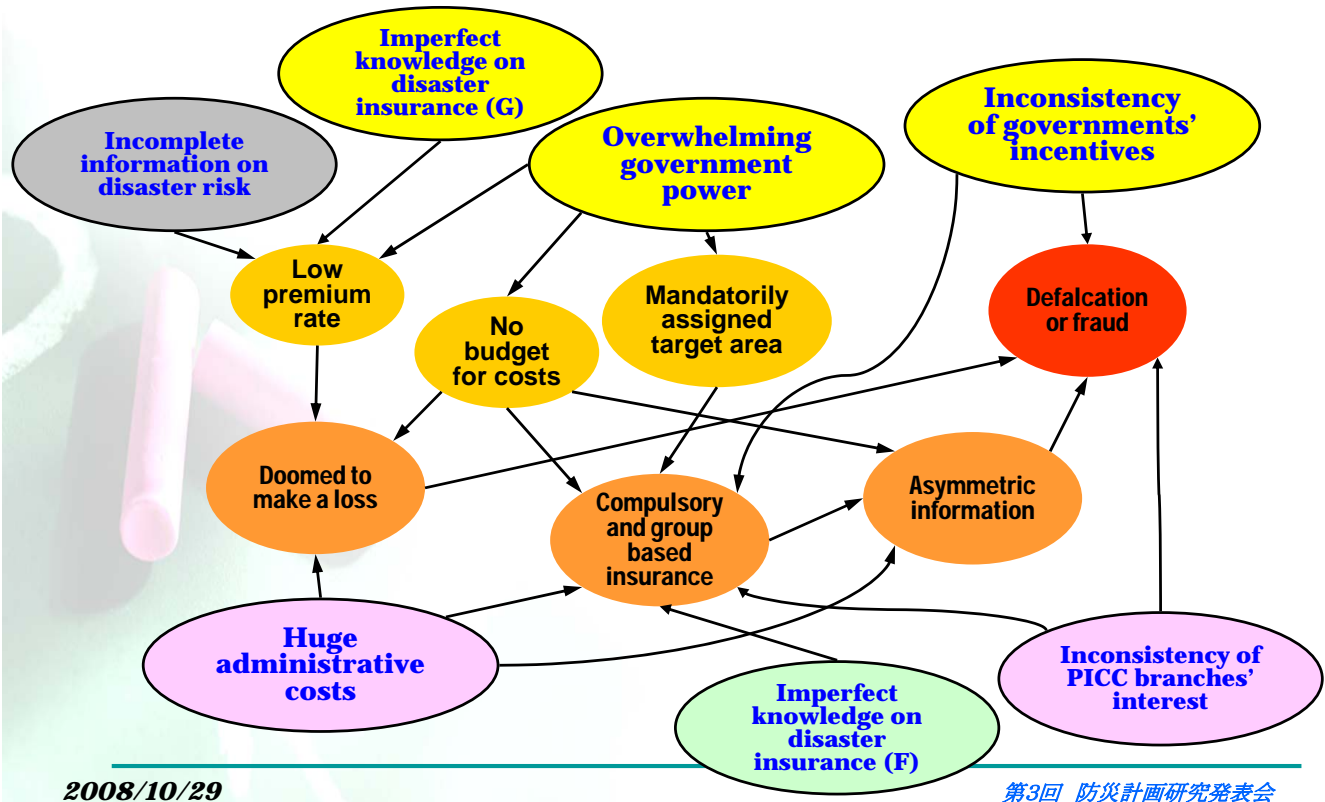
The Game



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Conclusion and discussion



Conclusion and discussion

- Some tentative comments:
 - The right of pricing insurance lines should be returned to the market. Governments should find their appropriate roles in this system: are they investors or just co-policyholders?
 - Considerable costs are raised as farmers have little knowledge and information on crop insurance and CAIP. The education process requires significant amount of investment. Who should be responsible to pay, the government or the insurer?
 - There is a trade-off between voluntary-individual insurance and compulsory-group-based insurance. Which one is better for China's rural area?



Thank you very much!

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