Opportunities and Risks of Internet Finance in China

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Key takeaways

- Internet finance has become an important form of inclusive finance, thanks to (1) undersupply of financial services; and (2) mobile terminals + big data analysis
- But it needs to be regulated properly (especially consumer protection), as many participants are financially illiterate and Ponzi schemes have become common
- China has the potential to become a global leader in internet finance, by effectively utilizing internet for risk management purpose

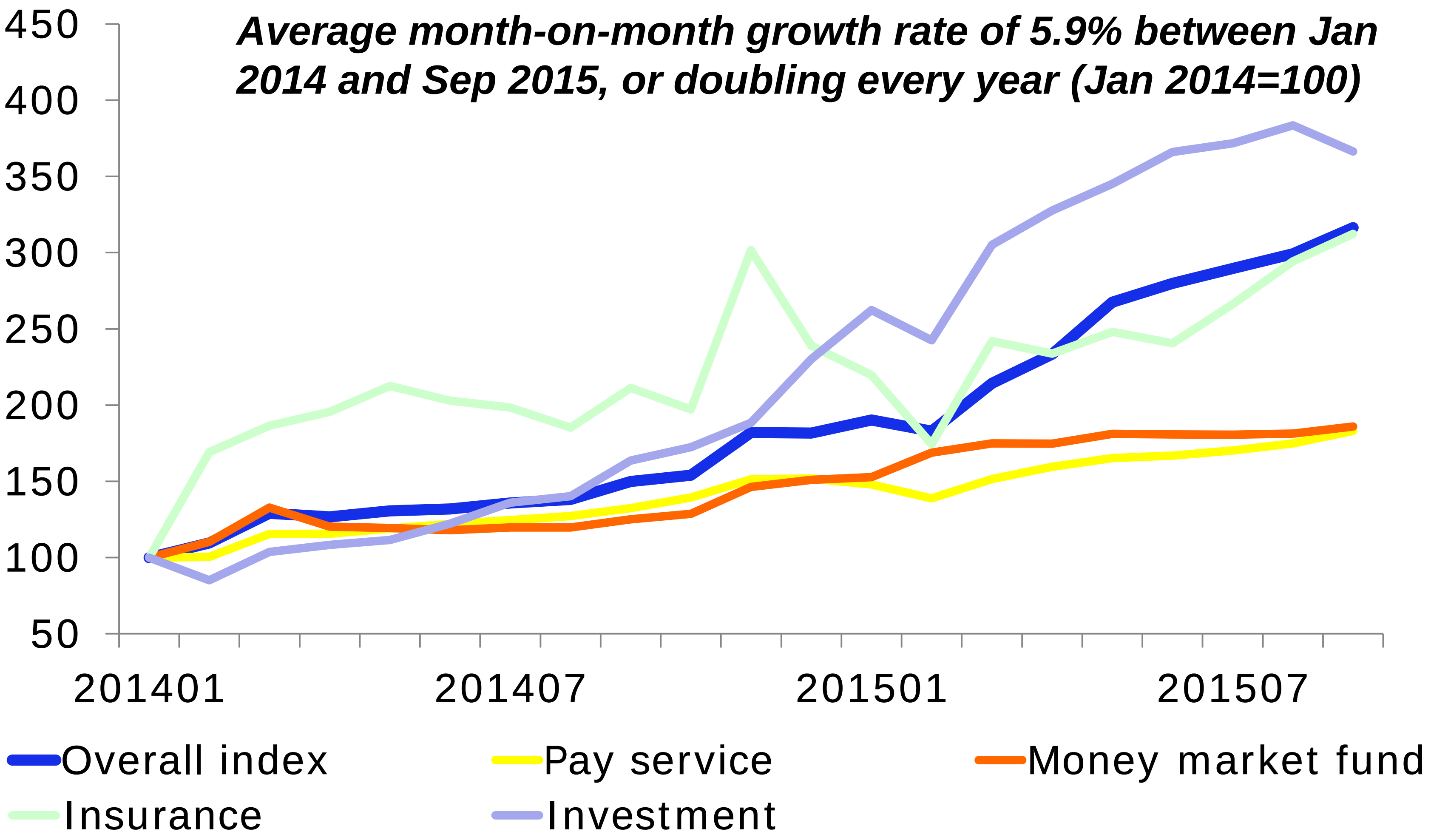
What is internet finance?

- The term was coined by Xie Ping in April 2012 (FinTech?)
- Two types: Financial institutions applying IT tools or IT companies providing financial services

Main businesses

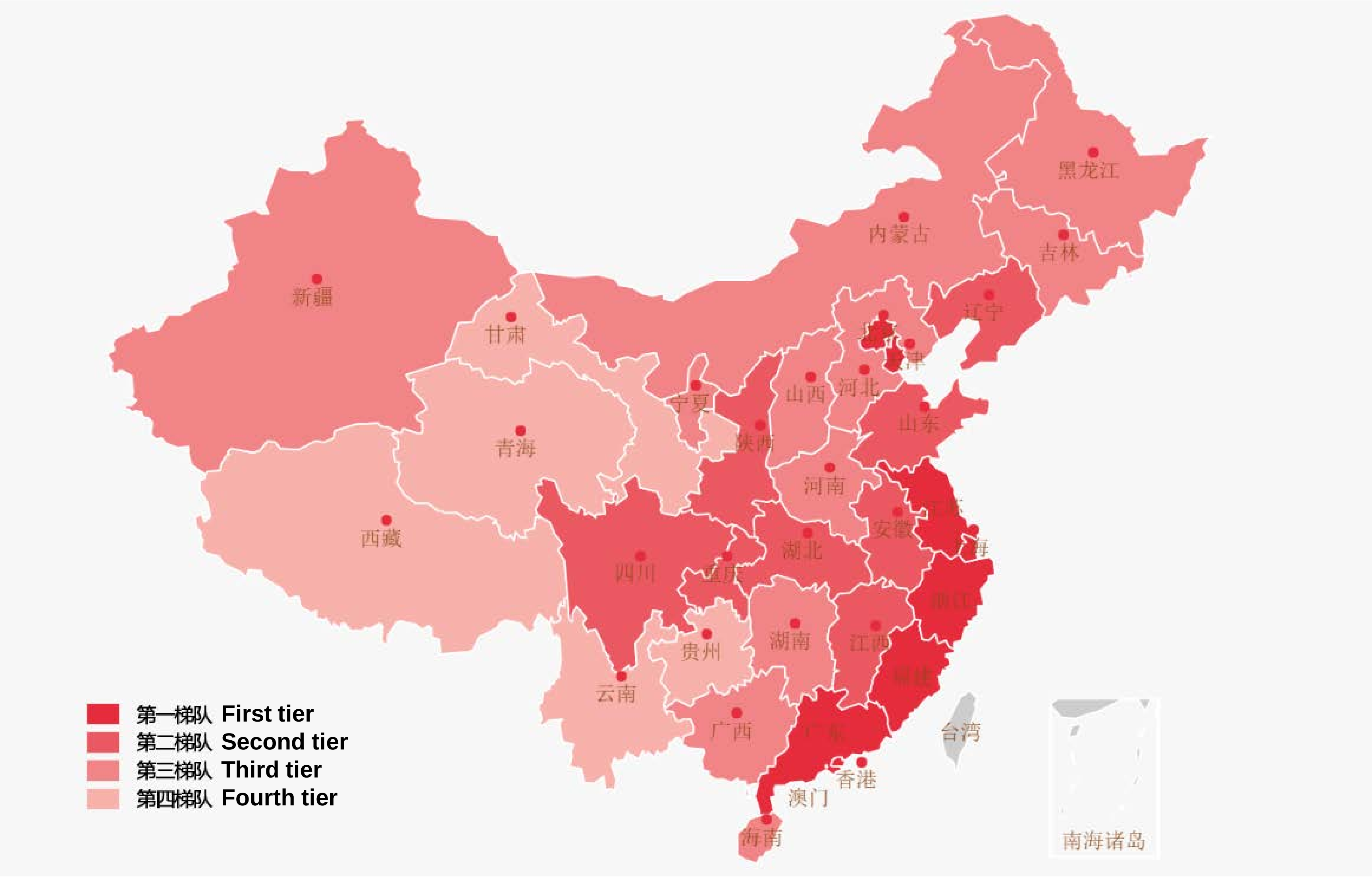
- Third-party payment: AliPay (支付宝), WeChatPay (微信支付)
- Online lending: Creditease Yirendai (宜信宜人贷), Ant Micro-credit (蚂蚁小贷)
- Crowd funding: Angel Crunch (天使汇), Dianming Shijian (点名时间)
- Distribution: Yu'ebao (余额宝), Zhaocaibao (招财宝)
- Insurance: Zhongan Online (众安保险)
- Online banks: WEBank(微众银行), MYBank (网商银行)
- Internet currency: Biticoin (比特币)

PKU Internet Finance Development Index

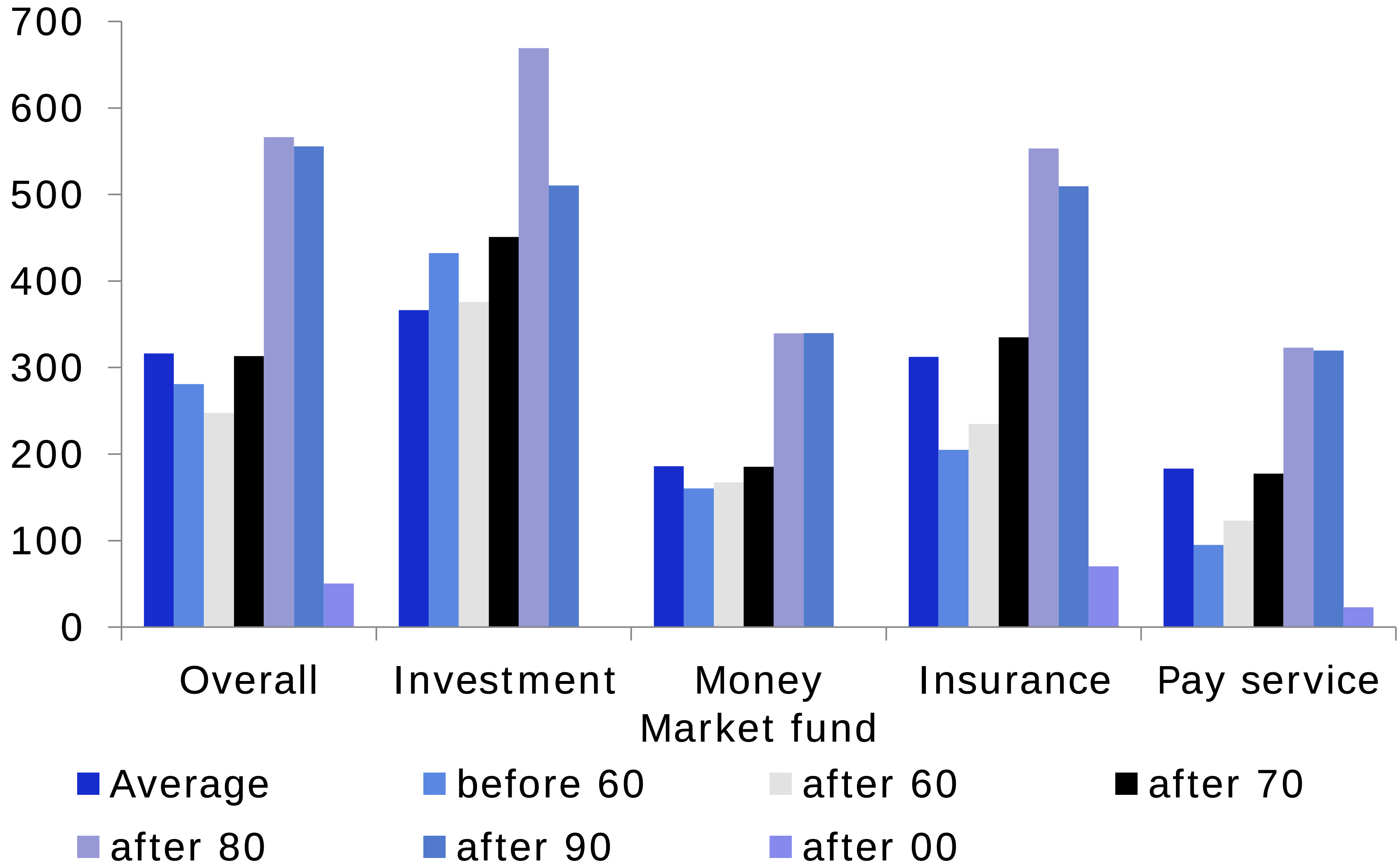


Guo Feng, Sherry Kong, Wang Jingyi, Cheng Zhiyun, Yuan Fangyuan, Shao Genfu, Wang Fang, Yang Jing, 2015, “Peking University Internet Finance Development Index”, Institute of Internet Finance, Peking University.

Indices by provinces (Sep 2015)



Indices by birthday groups (Sep 2015)

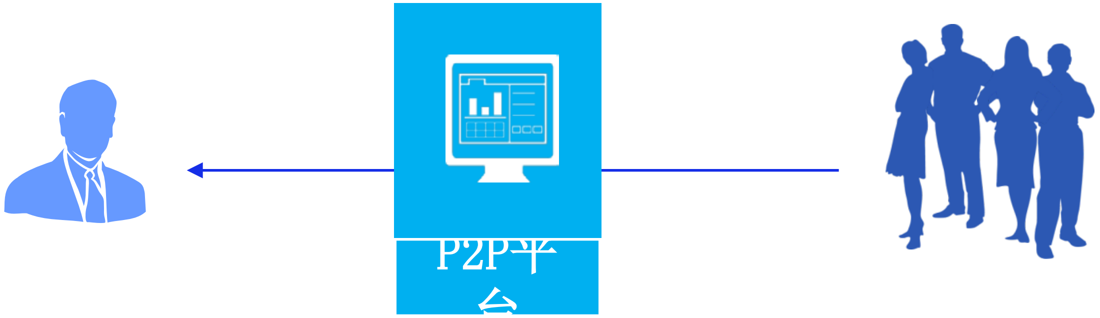


Will China lead the industry?

- Product life-cycle theory: Vernon
- Is internet finance a real financial product or simply a bubble boosted by regulatory arbitrage?
- Favorable conditions:
  - Undersupply of financial services by the formal sector (an important form of inclusive finance)
  - Development of IT (700 million smart phones plus big data analysis)
- Internet financial services: high fixed cost but low marginal cost, long tail
- Key test: If IT can effectively help reduce information asymmetry, then internet finance will stay and grow. But it’s not easy.

A case study: Peer-to-peer (P2P) lending

- P2P enables individuals to directly lend money to other people or companies through online platforms
- An important form of inclusive finance: both borrowers and investors are not well serviced by formal financial sector
- Is it indirect or direct intermediation?



Borrowers P2P Investors

Huang Yiping, Shen Yan and Wang Jingyi, 2015, “Which online lending platforms are more likely to turn problematic? A systemic analysis of 3439 platforms and implications for regulation”, National School of Development and Institute of Internet Finance, Peking University.

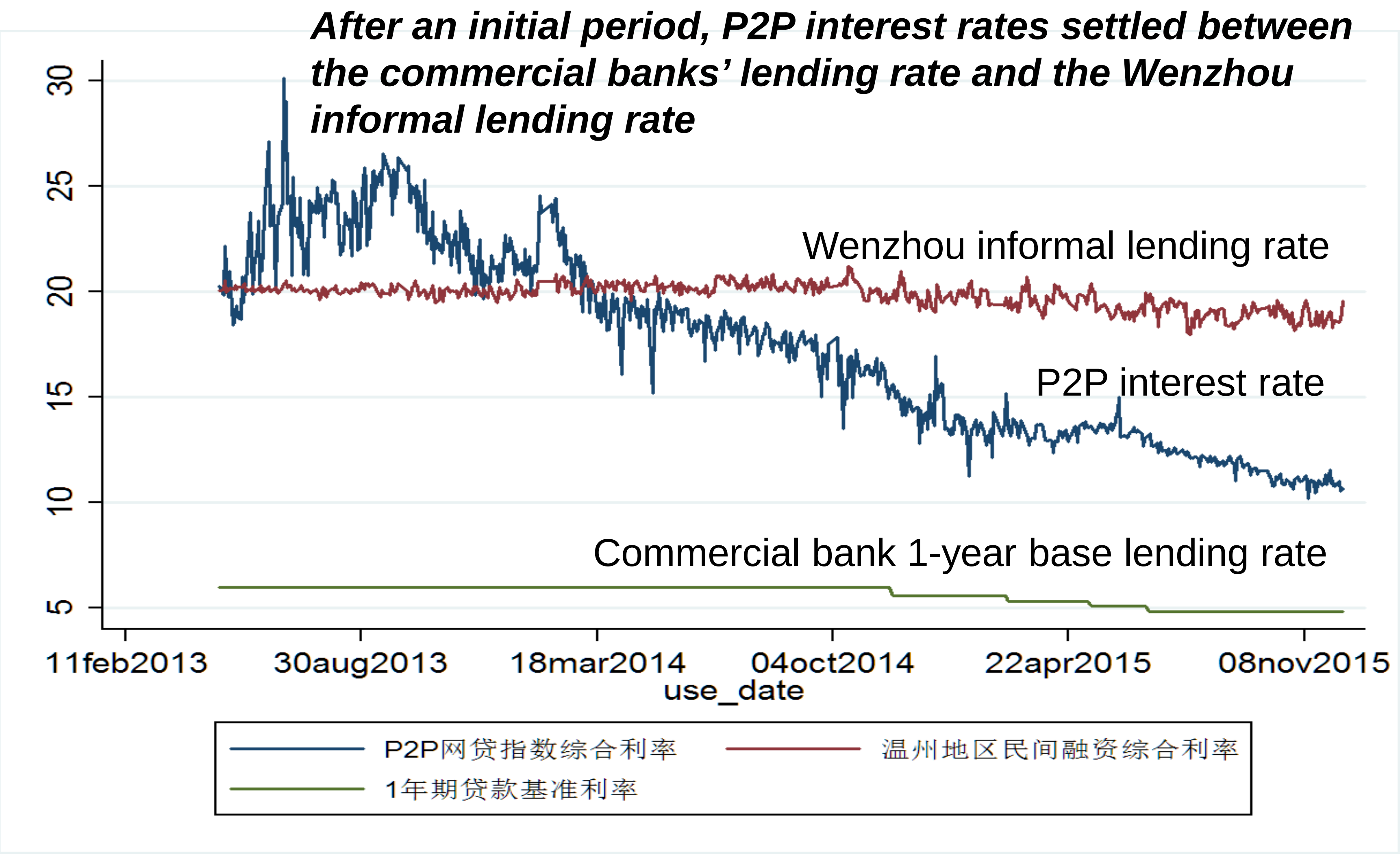
Forms and growth of P2P in China

- Zopa in the UK, Lending Club in the US. In China, there are different models:
  - Creditease (宜信，transferring liability)
  - Paipaidai (拍拍贷，information intermediary)
  - Renrendai (人人贷，third-party guarantors)
  - Youliwang (有利网，platforms for small loan companies)

	Platforms	Total loans	Outstanding loans
	#	￥bn	￥bn
2012	200	21.2	5.6
2013	800	105.8	26.8
2014	1575	252.8	103.6
2015*	3769	848.6	400.5
2012-15 Growth (%)	*1784.5*	*3902.8*	*7051.8*

* Numbers for 2015 ended in September 2015.

P2P interest rate



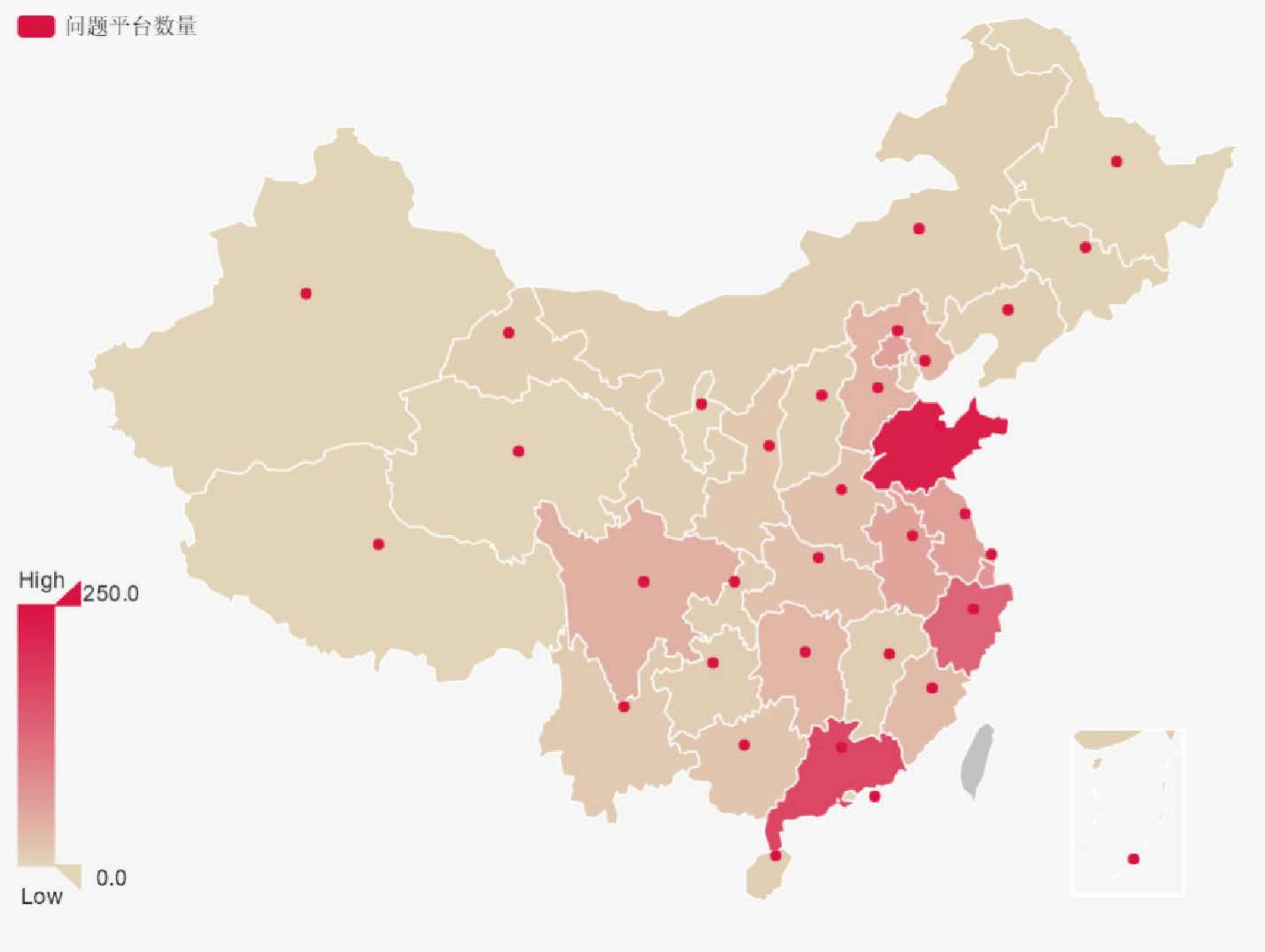
Rising proportion of problem P2Ps

We gathered information of 3439 P2Ps, including 1073 problem ones, from publicly available sources.

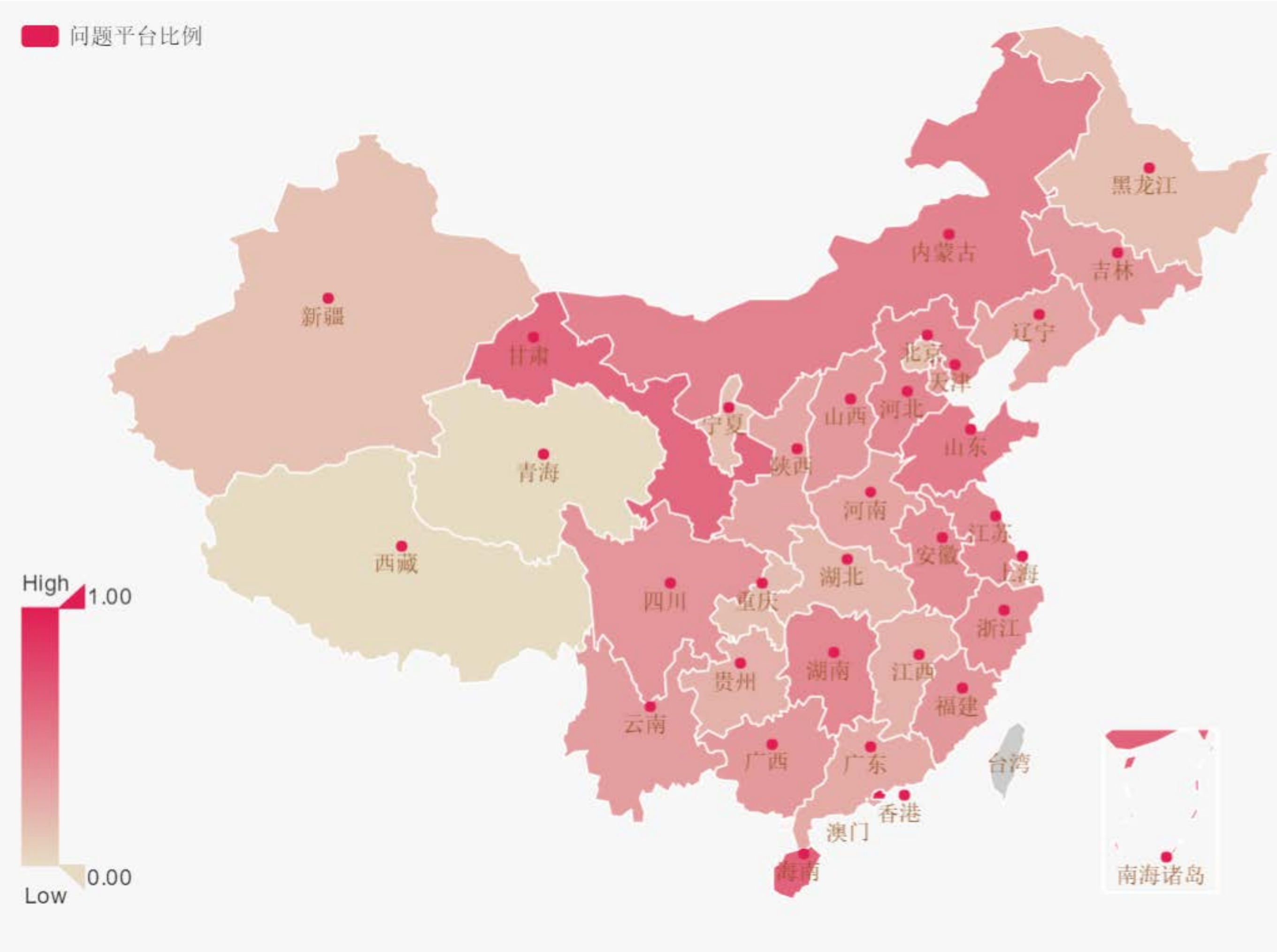
In 2015, already one in every three P2Ps turned problematic!

	Newly increased		Cumulatied		
	Total	Problematic	Total	Problematic	Share (%)
2005	1	0	1	0	0
2007	1	0	2	0	0
2009	3	0	5	0	0
2010	12	0	17	0	0
2011	30	0	47	0	0
2012	87	0	134	0	0
2013	463	69	597	69	11.6
2014	1571	236	2168	305	14.1
2015	1271	768	3439	1073	31.2

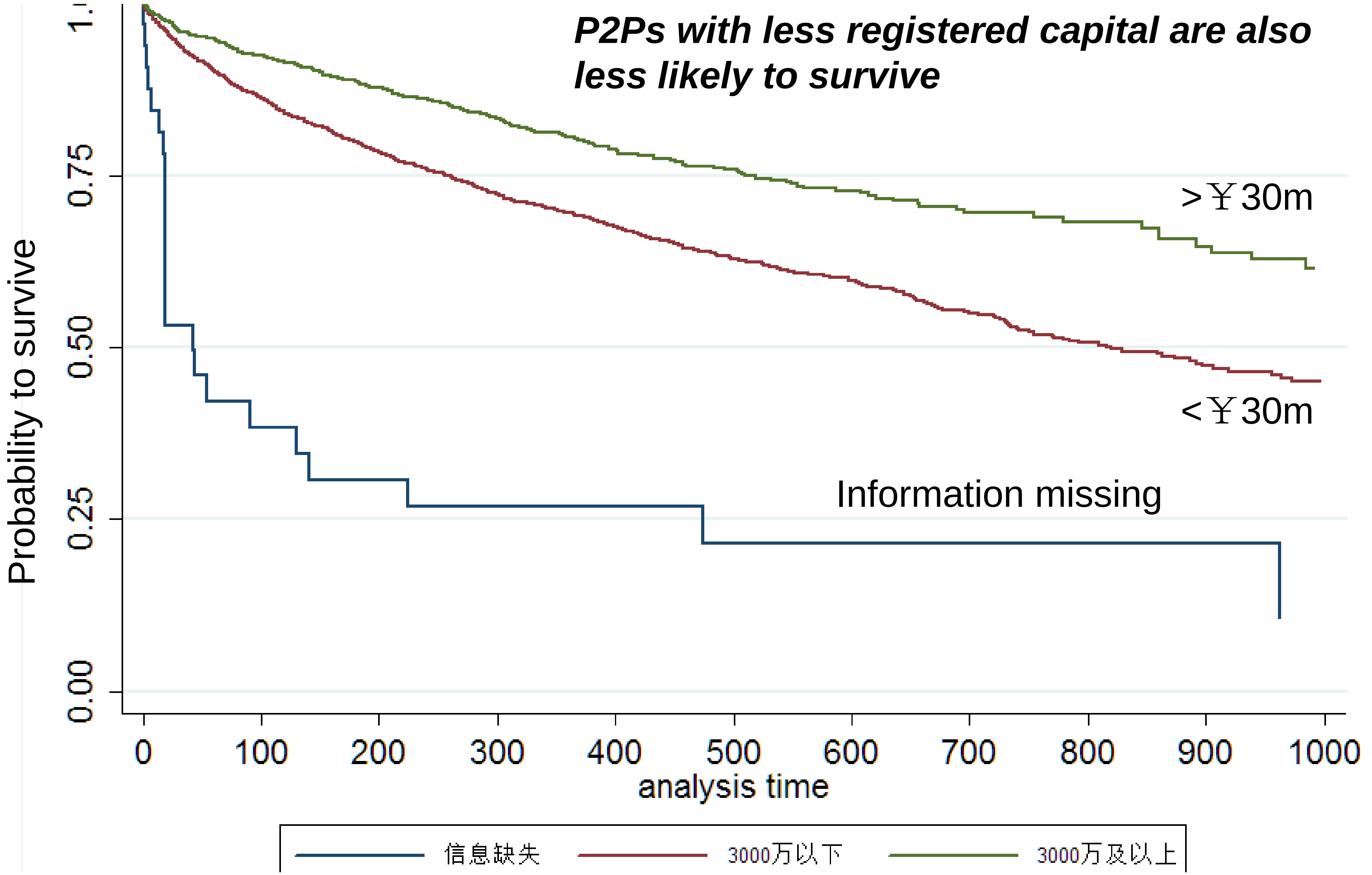
Problem P2Ps concentrate in some areas



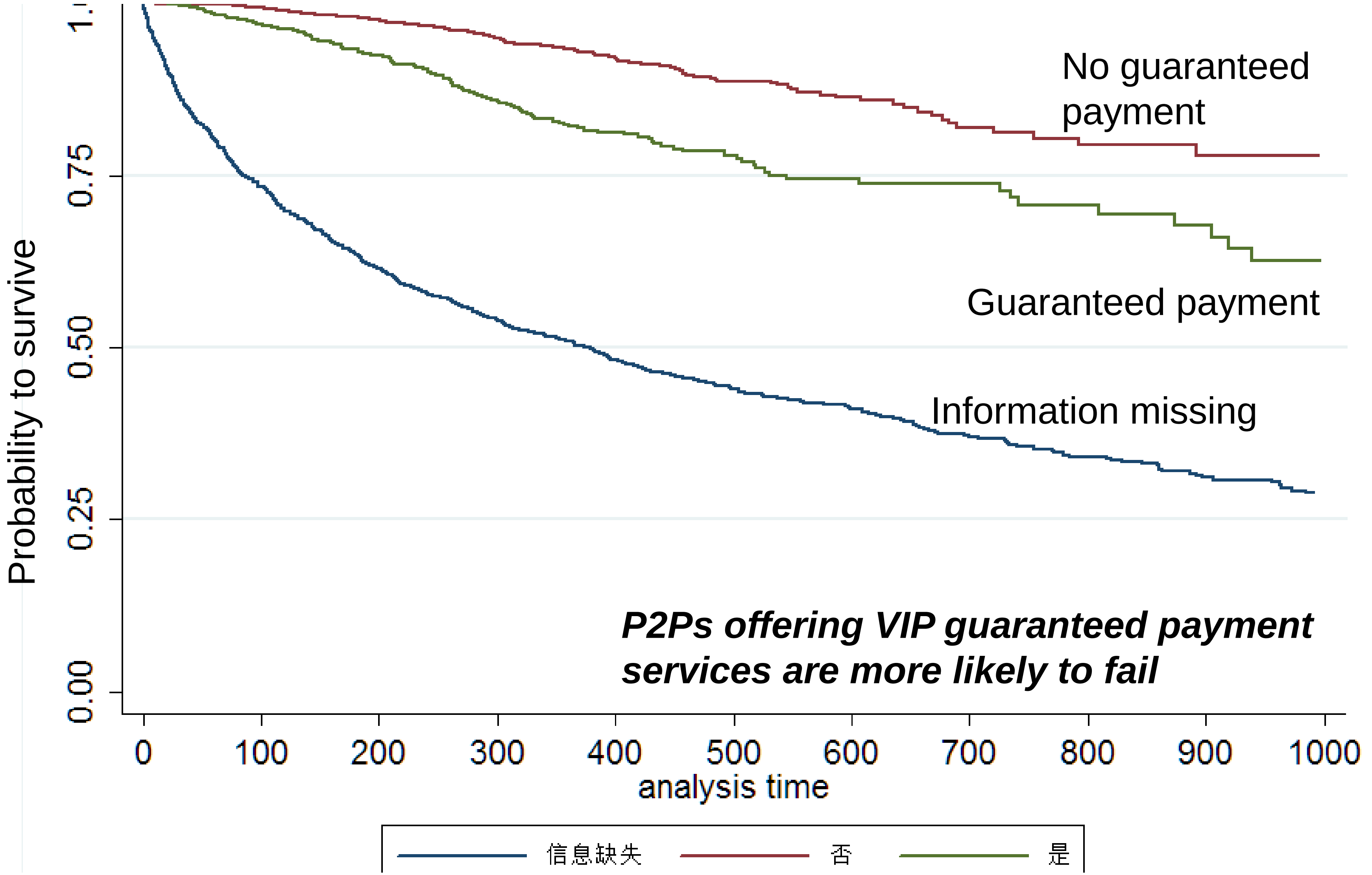
But their proportions do not



Kaplan-Meier survival curve: Capital



KM analysis: VIP guaranteed payment



Quantitative assessment

	Risk value			Life expectancy		
	Weibull	Gom	Cox	Logn	Logl	Gamma
Est. in 2013	0.95***	1.55***	1.43***	-0.87***	-0.87***	-0.84***
Est. in 2014	1.58***	2.23***	2.30***	-1.46***	-1.43***	-1.40***
Est. in 2015	2.84***	3.64***	3.65***	-2.60***	-2.58***	-2.51***
Missing term info	+***	+***	+***	-***	-***	-***
IR <8%	+***	+***	+***	-***	-***	-***
IR>20%	+***	+***	+***	-***	-***	-***
Single term product	+***	+***	+***	-***	-***	-***
Term >12 months	-*	-*	-*	+*	+*	+*
VIP Guarantee	+***	+***	+***	-***	-***	-***
Bank/Insurance guarantors	-***	-***	-***	+***	+***	+***
Customer service line 400	-***	-***	-***	+***	+***	+***

Summary and implications for regulation

- P2Ps with missing information, more recent establishment date, abnormal interest rates (<8% or >20%), less products in terms of type and term, and VIP guaranteed payback have both greater risk and shorter life expectancy.
- CBRC just proposed a regulatory framework, which requires P2P to only provide information intermediation, sets no entry qualification and designates local governments to approve and regulate the industry.
- Key characteristics of P2Ps: little information about borrowers; limited risk assessment ability by investors; internet links participants in different locations
- Some basic qualification, business regulation and central regulatory coordination might be necessary?