

A Study of Inclusive Financial System in China

Chinhui Jerry Hao

Research School of South East Asian Studies, Xiamen University, No. 422, Siming South Road, Xiamen, Fujian, China

Abstract

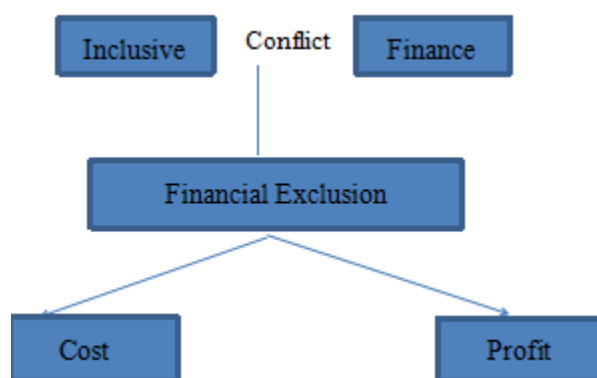
Since 2006, the United Nation has strongly promoted the inclusive finance system to the world. The goal is to achieve that each of the developing countries should have an inclusive financial sustainability system, common to all levels of the population with providing appropriate financial products and services. Under this circumstance, The World Bank and G20 group further research the basic principles of inclusive finance to help poor and low-income people out of poverty, provide the construction framework, and measure the system quantities' index. It comes out the short-term goal is to solve the gap between rich and poor, avoid the financial crisis, improve financial fairness, reduce financial exclusion and increase inclusive finance. Furthermore, the long-term goal is to increase the national income (GDP) and maxima the social welfare. However, inclusive finance is fundamentally conflicted. Both welfare and profit are incompatible in nature. The outcome of the conflict is financial inequity and financial exclusion. The low-income, small and medium-sized business owners and these disadvantaged groups are unable to get the completed financial services. Overall, finance inclusion or finance fairness in recent years has been hot topics for UN, IMF or G20. The leadership team has high pressure to provide the packaged solutions that integrates those missing population back into the financial system by 2020.

Keywords: inclusive finance, finance exclusion, financial fairness, inequity

1. Introduction

In research field, many scholars have different concepts to address inclusive finance issues. Some of them suggest government should provide wide ranges' policy, regulation or budget to support the system (Jiao Jin Pu, 2012). The other think it is business environment and its sustainability should be critical (Hu Guohui, Wang Jing, 2008). If consider the reality situation, the inclusive financial sustainability is probably the best choices (Du Chao, 2010). How can we have the nature of financial sustainability? Economics has the method called cost benefit analysis. Moreover, either reducing costs or increasing revenue can help the business's profit and extend its life (see figure 1).

Figure 1 conflicted inclusive finance



Benefit

First of all, the probability to have incremental revenue in capital market theory is low, because Mr Marks argues that long-term capital yields usually have fallen on historical trends. Also, according to Professor Piketty's research on "Capital theory in the 21st century", it supports the argument that the long term's capital yield rate is getting lower and lower.

Cost

Secondly, if the institutions can't raise the income, the only left choice is to lower the cost (Song Yu, 2010). There are various categories of cost such as, fixed costs, variable costs and transaction costs. Based on the complicated combination of fixed and variable cost, the economic entity can serve different client structure in best efficient method. For example, if financial institutions have high fixed cost (established large systems and offices) and high variable cost (setting up a branch or opening up a new market), like conventional commercial banks, insurance or fund companies, they probably are better to service high net worth income people or larger companies. As a result, these well established banks decide to build new inclusive finance system is not economic. On the other hand, if the fixed cost and the variable cost are low, like internet finance companies, they are the solution to reduce the

search costs, increase transparency, make the low cost communication negotiations and achieve economies of scale by covering more groups and people (Dounp Scott, 2013). In accordance with the law of economics and niche market theory, these new technology opportunities will bring new markets or expand differentiation into inclusive finance.

Transaction Cost

In term of inclusive finance transaction costs, they work for two sides of the financial transactions. One is financial institutions that provide funds and services. The other is demand side that needs loans and service. How to reduce transaction costs? According to Coase theorem, these are many effective methods such as, clear property rights, reducing the searching cost, communication cost, increasing the transparency or preventing market failure of policy.

Again, we depend on costs benefits analysis to analyze how to allocate resource to finance inclusion market. The research is separated to two sides: supply and demand (Bernard Lett, 2010).

Supply

For suppliers, they currently only provide loans service to low income people without other opportunities such as payment service, insurance or job opportunities in the past. If now, they can offer not only job opportunities, but also other financial services such as insurance, financial management; these changes definitely help people to have more economic power and lead to significantly increase inclusive finance demand. In addition to those discussed services, society an also promote the financial education to people, reduce the asymmetric information via Internet technology, and cooperate with the government or other NGOs to enable the continued growth of finance inclusion.

Demand

For demand side, by integration those loan requesters into bigger division of the job network (comparative advantages), they not only can receive an approved loan easily, but also increase income by having more job opportunities. From the whole society point of view, the loan borrowers who have been ignored (finance exclusion) now can provide their labour resources into society to max the total utility of society. In the meantime, each person earns more income that improves their reimbursement ability. To sum up, the first method is try to add these new labours into society of job network. It makes possible for finance exclusion people to work and receive financial services. The second one is using Coase theorem, which reduces transaction costs (Ulen,Thomas, Cooter, Robert, 2000), this idea leads more people can access to these financial services (finance inclusion) based on a scalable economics effect.

2. Literature review

Travis outlaw and Ryan (1994) were the first scholars to study the inclusive financial sustainability research field. They stated that these 2 following conditions existed and then the finance inclusion system was sustainable. Number 1 was microfinance project went entirely through customer deposits and commercial interest rate was the same with formal financial institutions (free market condition). And number 2 was its fees and interest income could be completely cover the real cost of capital, loan loss reserve, operating costs and inflation (business profit). With these 2, the inclusive financial institutions' sustainability could be achieved.

Before finance inclusion, microfinance is the primary concept to help low income group. During the microfinance early stage, the main target is to expand the financial vulnerable groups and the poor coverage. Ledgewood (1998) mentioned inclusive finance system must balance the two conflicting goals, inclusion and profit. Because of those two different agendas, there were two separated groups, welfare party and institutionalisms. The welfare party represented by Dichter, argued that coverage of target customers was more important than financial sustainability.

The institutionalisms, on the other hand, represented by American scholar Sharma,Buchenrieder (2002), argued that the dual goal of microfinance is to coexist and be compatible, and that only sustainable institutions can continuously expand the range of services.

Recently, the finance inclusion's future direction is more towards to commercial trend or institutionalisms. As a result, due to large commercial capital from government put into inclusive finance system, their sustainability has gained significantly improved. However, the deviation for the original goal setting is happening (Pitt and Khanker, 1999; Morduch, 2000; Karlan and Zinman, 2009), which led to the current study of financial institutions' target deviation.

Main research is working on these following aspects: (1) the definition of target deviation (2) the reasons for the deviation of the target (3) measurement of target deviation (4) the empirical test of the target deviation (5) the target deviation management. In China, the present situation of domestic research is mainly reflected in three topics: (1) the dual goals and related conflicts of rural financial institutions (2) why cause the target deviation of the micro-financial institutions (3) how to manage or govern the target deviation of the micro-financial institutions. Even though Chinese scholars have studied these topics significantly, these gaps are still huge between China and the western.

Object

First of all, the research object is different. American scholars prefer to use Bolivia, Indonesia or other mature

microfinance institutions as the research topics. On the other hand, Inclusive finance research in China is still predominantly study only few rural microfinance institutions' background and lack of comprehensive representation.

Content

Secondly, the research content is limited to theory and not accepted widely. Chinese researches are confined to theoretical research and focused on the concrete analysis of small projects. However, western scholars have been discussed in the loan amount, coverage, financial sustainability and other advanced topics.

Method

Thirdly, the research methods have limitations, using theoretical analysis, statistical analysis, and case analysis. By contrast, international scholars are working on the method of empirical analysis to solve the financial institutions risk measurement and target deviating.

Scope

Finally, the research perspective is narrowed. The China domestic literature in considering financial inclusion sustainability does not consider the macro factors and related systems such as market risk, insurance, internet technology and other external changes. Furthermore, insurance involvement to financial inclusion sustainability is a newer topic in treatment. There is little research papers can be found in the filed. Overall, finance inclusion is getting popular in China and has gained serious attenuation from governments.

3. Definition of finance inclusion

What is inclusive finance? Its value orientation is inclusive for everyone especially poor or weak groups. Its strategy is "blood" and "sustainable", through the government, market and social organization of the cooperation (He Sijiang, Yan Gu Jun, Chen Hunghua, 2010). Its form or path is going through gradual improvement that helps the poor obtain adequate financial resources. One effective method is to put them into the global economy of the labour system.

In other words, it is an efficient, sustainable, flexible financial trading platform. Suppliers can be traditional Banks, insurance or emerging financial technology companies, as well as individuals and other policy-based Banks (Bei, 2016).

The demand side can be any individuals or enterprises, including low-income farmers and small businesses. The functionality of government or the world organization should focus on assisting the platform how to reduce the search, negotiation or operating costs during the transaction (He Weida, Yang shihui, 2000). In addition to reducing transaction cost, government should think how to lower asymmetric information, increase transparency and prevent market failure rather than strong intervention that leads to minimize social benefits. In term of effective methods and tools, technology plays the critical roles and can be used to reduce transaction costs and increase transparency. Furthermore, according to research, raising the common citizen's financial knowledge or education is the great way for inclusive finance (Wu Xiaoling, Jiao, 2015). As a result, any conditions that can increase social benefits, expand supply and demand groups, or reduce transaction costs in this financial dynamic system can be considered the ideal solution for government to promote finance inclusion's sustainability.

4. Inclusive Financial System (IFS)

United Nation started IFS idea and IMF, World Bank as well as G20 followed this worldwide concern very seriously. After many discussions, The G8 endorsed CGAP's *Key Principles of Microfinance* at its 2004 Sea Island, Georgia, USA. This book (Brigit_Helms, 2006) provides an inclusive financial system's framework that recognizes that the massive number of excluded people will gain access only if financial services for the poor are integrated into all three levels of the financial system: micro, meso, and macro (see figure 2).

FIGURE 2 an Inclusive Financial System



This more specific information:

- **Clients.** Poor and low-income clients are at the center of the financial system. Their demand for financial services drives the actions of those at all the other levels
- **Micro.** The backbone of financial systems remains retail financial service providers that offer services directly to poor and low-income clients. These micro-level service providers run the gamut from informal money lenders or savings clubs to commercial banks and encompass everything in-between.
- **Meso.** This level includes the basic financial infrastructure and the range of services required to reduce transactions costs, increase outreach, build skills, and foster transparency among financial service providers. It includes a wide range of players and activities, such as auditors, rating agencies, professional networks, trade associations, credit bureaus, transfer and payments systems, information technology, technical service providers, and trainers. These entities can transcend national boundaries and include regional or global organizations.
- **Macro.** An appropriate legislative and policy framework is necessary to allow sustainable microfinance to flourish. Central banks, ministries of finance, and other national government entities constitute the primary macro-level participants.

Specifically the framework of IFS is described in the following in China.

Clients: The demand side of inclusive finance refers to the independent economic persons or groups, actively engaged in production, exchange, distribution and consumption activities. The need for inclusive finance can be divided into: financing, capital integration and other financial intermediary services. Moreover, the financing service includes deposit and investment; and the capital integration refers to loan. Lastly, the investment is purchasing treasury bonds, stocks and other financial investments. If discuss more precisely, the deposit of inclusive finance has three purposes: (1) security of guarantee fund (2) maintain the flexibility of capital, access to freedom or meet long-term or emergent capital use (3) obtain the profitability of capital such as interest income. In term of motivation of savings, one is cautious deposits, in a sense, this kind of deposit can be treated as insurance. Its main purpose is to protect people who they meet the natural disasters, accidents or illness as emergency funds. In fact, using social security or relevant insurance service to replace emergency deposit is the best solution to small and medium-sized enterprises, farmers or low-income groups.

The other is to accumulate savings for a clear purpose such as farmers who need to expand production or fixed asset replacement. These amounts usually are large and people need a longer time to achieve it. At this stage, China has the wide distribution of financial institutions; the demand for the deposits of inclusive finance is usually met by formal financial institutions. Furthermore, other financial intermediation services can also easily be accessed to most people. However, the gap between loan request and current saving deposit is difficult to balance. How to bridge the gap? The source of funds include personal accumulation and stock investment, private financing, formal financial loans, a variety of investment. But generally speaking, capital requirements are facing huge pressure. Lack of enough capital is the bottleneck of the development. In additional to shortage, the financing channels and financing costs are high (Zhang zhengping, 2015).

Micro: The supply of inclusive finance, namely, the organization or organization that provides the financial

services for the financial services, is mainly divided into (1) formal financial institutions, (2) informal financial institutions and (3) Internet finance (Zhu jiolin, 2016).

1. Formal financial institutions providing inclusive finance refers to the formal financial institutions approved by the government. In China, there are central bank (The People's Bank of China), Policy Banks, Commercial Bank, Cooperative Financial Organizations, and other financial institutions.

- Policy Banks in China are China Development Bank, Agricultural Development Bank and Export-Import bank. Its operation model is different from commercial organization that is for surplus profit and is also different from fiscal policy which allocates financial budget without business purpose Their current operation is to achieve the goal of the government's macroeconomic development under the fiscal subsidy or government guarantee and their target are rural areas and vulnerable groups. Currently, China's policies Banks even though enter the inclusive finance business, the business scope is narrow and the contribution to the economic development is weak. These issues are caused by a shortage of funding.
- Commercial financial institutions are in accordance with the company law of the People's Republic of China established the "commercial bank law of the People's Republic of China. The profit maximization is the management's goal. There are 4 major banks: the Industrial and Commercial Bank of China, Agricultural Bank of China, Bank of China, and Construction Bank of China. These state-owned commercial Banks' operating principles are based on these concentrating, large, common characteristics of the management and service, which cannot adapt to inclusive finance that is scattered, small, personalized features. Due to recently or continuously removing offices in the western region and rural areas, in western economic (less developed areas and rural areas) is serious hurt by these 4 major state-owned banks (Zou Li, 2012).
- Cooperative financial institutions are a branch of economic cooperation, based on the principle of cooperative system and the form of financial principles. In China, Cooperative financial institutions for inclusive finance have facing survival trouble.

2. Informal financial institutions have become an important source and meet the demand of inclusive finance. Informal financial institutions are divided into two types: (i) direct financing between individuals (or enterprises) (ii) indirect financing provided by informal financial institutions, including private lending, financial aid, and third party agents.

Private lending refers to a natural person (or business) set up the contract that the lender transfers a certain amount of money to borrowers. It is the civil action and need to pay agreed interest as a loan.

Private lending is flexible, convenient to apply and fast. As a result, it is a common form of informal financial organization in China, including the borrowing of relatives and friends.

3. Internet financial (ITFIN) refers to the traditional financial institutions and Internet companies use the Internet technology and information communication technology to realize financing, payment, investment, and a new financial business model of information intermediary service. It is the combination of Internet technology and the financial function, relying on big data and cloud computing on the open Internet platform. As a result, this is the excellent solution for inclusive financial system to resolve fragments, platform, finance, financial information and other issues, different from traditional financial models. There are few development models:

- Crowdfunding refers to raising project funds from Internet users like purchasing pre-orders. The intention of the raised fund is through the Internet and the spread of the SNS features that startups, artists, or the individual to the public display of their ideas and projects, get everyone's attention and support, and collect required budget.
- P2P lending refers to the loan funds through third-party Internet platform. It has 2 sides: debit, the need of borrowing and credit, people to lend the ability and willing to lend. Two operation modes, the first is pure online model, which is characterized by the online process of capital lending activities, without the offline review. The second is the combination of online mode; the borrower submitted online application for borrowing. After that, the platform work through with credit agents to audit the creditability of the borrowers such as repayment ability, income, and other critical factors.
- Internet insurance is a new kind of insurance marketing mode based on computer Internet, which is different from traditional insurance agent marketing mode. It enables customers to choose products independently. They can compare the products of many insurance companies online, the premium is transparent, and the guarantee rights and interests are also clear, which can greatly reduce the cost and provide affordable product.

Meso: it is solid well-functioning financial infrastructure and other service providers, including promote financial institutions that can improve the transparency of information system, technical service provider for training and consulting, business association and the related network.

- Infrastructure mainly refers to the payment and settlement system. The normal operation for these systems helps that money flow smoothly between the different financial institutions. Safe, effective and reliable

payment clearing system is essential to the healthy operation of the financial system. The payment tools include cash, checks, commercial bills, bank drafts, bank promissory notes, debit cards, debit cards, online payments, telephone payments, mobile payments and ATM.

- Financial transparency means that market participants can obtain accurate, timely and comparable information related to performance of financial institutions. Transparency is the foundation of the inclusive finance system.
- The management information system (MIS) helps the inclusive financial institutions to collect and disclose accurate, useful data in a timely manner. The management information system is the basis of financial transparency, and the quality of the information affects all other aspects. Internal control and external audit help verify the quality, completeness and accuracy of information provided by financial institutions. Performance evaluation mainly allows management and external participants, such as bank regulators, investors or customers, to monitor the performance of financial institutions over a period of time.
- Technical support services, the skillful job training and reconstruction of inclusive financial system ability, are the most urgently needed for Mesoscopic level.
- "Network" usually refers to the global or regional level service agency organization, and "association" is usually at the national level, there is also some regional and global levels, and is membership based organization. These associations and networks have made significant contributions to the central view, providing services not only directly or indirectly, but also for providing collective vocalizations for financial services providers.

Macro: The role of the government in building a financial system has been a controversial topic. Should the government participate in inclusive finance? Should governments lend directly to groups that are excluded from the financial system? Or should the government let financial institutions go free? Despite the different opinions, there is a consensus gradually reached, the government should provide a suitable policy environment that financial service providers can provide high quality and low cost of financial services to poor people. Historically, governments have provided loans to specific economic ministries or groups. Some have access to credit programs directly through state-owned Banks or other government departments, or wholesale loans from central Banks. In China, government plays the most important role for finance inclusion.

5. Inclusive Finance Measures

Measurement is the benchmark to understanding financial inclusion and identifying opportunities to remove the barriers that may be preventing people from using financial services. Financial inclusion is measured in three dimensions: (i) access to financial services; (ii) usage of financial services; and (iii) the quality of the products and the service delivery. The Basic Set, which addressed some of the key access and usage indicators, is hereby extended into the G20 Financial Inclusion Indicators, covering the three dimensions and providing further insight into access and usage aspects, including indicators on the emerging mobile financial services space. Both supply-side and demand-side data is included to form a comprehensive view.

Table 1: The G20 Financial Inclusion Indicators

Category	Indicator	Source and coverage	Dimension	Aspect
1	Formally banked adults	% of adults with an account at a formal financial institution	Usage	Individuals
		Number of depositors per 1,000 adults OR number of deposit accounts per 1,000 adults		
2	Adults with credit at regulated institutions	% of adults with at least one loan outstanding from a regulated financial institution	Usage	Individuals
		Number of borrowers per 1,000 adults OR number of outstanding loans per 1,000 adults		
3	Adults with insurance	Number of insurance policy holders per 1000 adults. Segregated by life and non-life insurance	Usage	Individuals
4	Cashless transactions	Number of retail cashless transactions per capita. <i>Cashless transactions are defined as the number of payments by cheque, credit transfers, direct debits, and payment with credit and debit cards.</i>	Usage	Individuals
5	Mobile transactional use	% of adults that use their mobile device to make a payment	Usage	Individuals
6	High frequency of account use	% of adults with high frequency use of formal account. <i>High frequency is defined as having taken money out of a personal account(s) 3 or more times in a typical month. This includes cash withdrawals, electronic payments or purchases, checks, or any other type of payment debit, either by account owner or third parties.</i>	Usage	Individuals
7	Saving propensity	Saved at a financial institution in the past year. <i>Institutions include banks, credit unions, cooperatives and microfinance institutions.</i>	Usage	Individuals
8	Remittances	% of adults receiving domestic and international remittances	Usage	Individuals
9	Formally banked enterprises	% of SMEs with an account at a formal financial institution	Usage	Enterprises
		Number of SMEs with deposit accounts/number of deposit accounts OR number of SME depositors/number of depositors		
10	Enterprises with outstanding loan or line of credit at regulated institutions	% of SMEs with outstanding loan or line of credit	Usage	Enterprises
		Number of SMEs with outstanding loans/number of outstanding loans OR number of outstanding loans to SMEs/number of outstanding loans		

Category	Indicator	Source and coverage	Dimension	Aspect	
11	Number of branches per 100,000 adults	IMF Financial Access Surveys (current, 187 countries)	Access	Physical points of service	
12	Points of Service	Number of ATMs per 100,000 adults OR number of ATMs per 1000 sq. km.	IMF Financial Access Surveys (current, 187 countries)	Access	Physical points of service
13		Number of POS terminals per 100,000 inhabitants.	WB Global Payments Systems Survey (current, 139 countries)	Access	Physical points of service
14	E-money accounts	Number of e-money accounts for mobile payments	WB Global Payments Systems Survey (forthcoming, 139 countries)	Access	Mobile points of service
15	Interoperability of Points of Service	Combined index of: Interoperability of ATMs and <i>Takes the value 1 if MOST or ALL ATM networks are interconnected and 0 if they are NOT interconnected.</i> Interoperability of POS terminals <i>Takes the value 1 if MOST or ALL POS terminals are interconnected and 0 if they are NOT interconnected.</i>	WB Global Payments Systems Survey (current, 139 countries)	Access	Interoperability of points of services

Category	Indicator	Source and coverage	Dimension	Aspect	
16	Financial Knowledge	Financial knowledge score. <i>Arithmetic score which sums up correct responses to questions about basic financial concepts, such as: (A) Inflation, (B) Interest rate, (C) Compound interest, (D) Money illusion, (E) Risk diversification, (F) Main purpose of insurance.</i>	WB Financial Capability Surveys & OECD National Financial Literacy and Inclusion Surveys (current, 34 countries combined, estimated 70 countries in two years)	Quality	Financial Literacy & Capability
17	Financial Behaviour	Source of emergency funding <i>Response to: If you had an emergency that required [\$10 or 1/25 of GDP] urgently, where would you get the money? a) borrow from friends/relative; b) work more; c) sell assets; d) use only savings; e) loan from savings club; f) loan from bank; g) would not be able to find it</i>	WB Global Findex (forthcoming, 148 countries)	Quality	Financial Literacy & Capability
18	Disclosure Requirements	Disclosure index combining existence of a variety of disclosure requirements: <i>(1) Plain language requirement (e.g. understandable, prohibition of hidden clauses) (2) Local language requirement, (3) Prescribed standardised disclosure format, (4) Recourse rights and processes (5) total rate to be paid for a credit (basic costs plus commission rates, fees, insurance, taxes)</i>	WB Global Financial Consumer Protection Survey (current, 102 countries)	Quality	Market Conduct & Consumer Protection
19	Dispute Resolution	Index reflecting the existence of formal internal and external dispute resolution mechanisms <i>(1) Internal dispute resolution mechanism indicator: law or regulation setting standards for complaints resolution and handling by financial institutions (including timeliness, accessibility, requirements to implement complaints handling procedures) (2) External dispute resolution mechanism indicator: System in place that allows a customer to seek affordable and efficient recourse with a third party (supervisory agency, a financial ombudsman or equivalent institution)</i>	WB Global Financial Consumer Protection Survey (current, 102 countries)	Quality	Market Conduct & Consumer Protection
20	Cost of Usage	Average cost of opening a basic current account.	WB Global Payments Systems Survey (forthcoming, 139 countries)	Quality	Barriers to use
21		Average cost of maintaining a basic bank current account (Annual fees).	WB Global Payments Systems Survey (forthcoming, 139 countries)	Quality	Barriers to use
22		Average cost of credit transfers.	WB Global Payments Systems Survey (forthcoming, 139 countries)	Quality	Barriers to use
23	Credit Barriers	% of SMEs required to provide collateral on their last bank loan (reflects the tightness of credit conditions)	WB Enterprise Surveys and OECD SME Scoreboard (current, 149 countries combined)	Quality	Barriers to use
24		Getting credit: Distance to frontier <i>Measures the extent of informational barriers in credit markets</i>	WBG Doing Business (current, 185 countries)	Quality	Barriers to use

All of the FI indexes are covered in three major dimensions: 1) availability, 2) usage and 3) quality. Every country has the different strategy to improve their FI based on their special status (Asli Demirci-Kunt Leora Klapper Dorothe Singer Peter Van Oudheusden 2014). Usually, government should address outreach issues (availability) firstly, provide service or products to people (usage) secondly and finally check the feedback or improvement of the finance inclusion (quality).

6. Conclusion

Chinese government has decided to take finance inclusion into the highest level since 2006. According to our research, there is a significant improvement in availability of finance use and payment processing because China has many internet finance technology companies. Compare to the rest of world, China's inclusive financial development level is higher than the average national level based on public research report from ADBI (ADBI, 2014). As we expect, availability dimension score is around average because Chinese area is large and population rate is high. Furthermore, some of areas (western part of China) have difficulties to receive loan or other insurance service even though government has put may policy effort into low income and farmers' group. Lastly, for service quality point of view, P2P platforms or other local banks have involved many increasing finance fraud transactions since 2014. Overall, China's level of financial development is improving, but there is still some rooms for development. This is still the long journey for China to reach finance inclusion.

References

1. Jiao Jin Pu (2012) "Inclusive Finance: basic principles and Chinese practice"
2. Hu Guohui, Wang Jing (2008) "Financial exclusion and financial system construction: theory and China practice"
3. Du Chao (2010) "The theory and practice of the financial development of inclusive finance"
4. Song Yu (2010) "Development path of inclusive finance: based on the Angle of financing of small and micro enterprises"
5. Dounp Scott (2013) Economics of the data age: rethinking the opportunities and risks in the age of cyber intelligence:
6. Bernard lett (2010) "The future of money"
7. He Sijiang, Yan Gu Jun, Chen Hunghua (2010) "Micro-finance: theory and practice"
8. Bei (2016) "inclusive financial national development strategy: China's inclusive financial development report: 2016"
9. Ulen,Thomas, Cooter, Robert (2000) "Law and economics"
10. He Weida, Yang shihui (2000) "Modern western property theory"
11. Wu Xiaoling, Jiao (2015) "China microcredit blue book"
12. Xie Ping, Chen Chao, Chen Xiaowen and others (2016) "P2P online lending in China: market, institutions and modes: market, institutions and business models"
13. Jiao Jin Pu (2016) "To build China's inclusive financial system: provide opportunities and approaches for the enjoyment of modern financial services by the whole people"
14. Illustration of Internet finance/history books
15. Zhu jiolin (2016) "New economy, new finance"
16. Zhang zhengping (2015) "The commercialization, risk and objective deviation of microfinancial institutions: theory and empirical"
17. Zhang Zheng-ping (2012) "Research on sustainable development of microfinancial institutions in China"
18. Zou Li (2012) "Open finance and sustainable development"
19. Brigit_Helms (2006) "Access for All Building Inclusive"
20. ADBI (2014) "Financial Inclusion in Asia"
21. Asli Demircuc-Kunt Leora Klapper Dorothe Singer Peter Van Oudheusden (2014) "The Global Findex Database 2014 Measuring Financial Inclusion around the World"

Jerry Hao (Xiamen University)

I was born in Taiwan and educated in USA (Master) and China (Doctor). I have B.S in Math (Fu Jen University 1993), M.S in Actuarial science (Boston University 1995) and Computer science (New Jersey Institute of Technology 1996). Prior to studying Xiamen University Economics PHD, my professional consulting and auditing experience were in PwC (New York City, USA) and KPMG (Beijing, China). Currently, my research areas in Xiamen University are including but not limit to Finance Inclusion, South East Asia regional integration, Environment Economics, Law Economics, China Overseas investment (M&A) and Finance Technology.