Personal Credit Scoring Guideline for Nano Finance in Thailand

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Abstract

This article argues that a within-case analysis of the causes and patterns of the Guideline for Nano Finance in Thailand. Using the method of systematic process analysis, the article explores the expansion of credit rating in Nano Finance in Thailand from three perspectives: historical (power), sociological (diffusion) and behavioral institutionalism (prospect theory). It demonstrates that the proliferation of credit rating resulted from a change of preference on the part of Thailand. Nano Finance will grant the maximum of 100,000 baht for each borrower without collateral. The borrowing purpose is for business operation, not for consumption. The highest charging interest rate should not exceed 36 per cent a year including effective interest rate charges, fees, and penalties. This high regulated interest rate (36% per annum) would attract many new lending players who are non-bank institutions. These new players may not be financial institutions who may have no any lending experience. Therefore, the personal credit scoring guideline can help them to screen the high potential borrowers in order to lessen the bad debt problems.

Keywords: Credit Rating, Nano Finance, Financial System, Institutionalism, Systematic Process Analysis

1. Introduction

Personal credit scoring is a statistical method to evaluate an individual's creditworthiness that represents credit payment history of a person. The scoring systems are different criteria depending on each credit bureau considerations. In the United States, there is a well-known organization, FICO (Fair, Isaac, and Company) who provides personal credit scores to national credit bureaus, banks, insurance companies, and financial institutions since 1989 (http://en.wikipedia.org/wiki/credit_score_in_the_united_states).

The Bank of Thailand (BOT) said "nano-financing" could provide added protection and fairness for consumers along with better management of informal loans outside the financial institution system through the increase of clarity and transparency, as nano-finance would encourage people to offer and get loans from within the formal system.

The Finance Ministry has devised the "nano-finance" concept to help non-bank lenders to extend money to grass-roots people, or those who don't have access to capital, as commercial banks are having cost difficulty in providing such loans to micro-borrowers. It plans to submit a proposal to promote nano-financing to Deputy Prime Minister Pridiyathorn Devakula before the end of this month.

Currently the smallest form of loan that financial institutions can offer is "micro-finance", which has a maximum loan amount of 200,000 Baht, at an interest rate of 28 percent, while the nano-finance idea would offer 100,000-120,000 Baht and the interest rate would be higher at 30-36 percent.

In methodological terms, the study uses systematic process analysis (Hall 2008), which compares the historical record of the emergence and institutionalization of rating in Thailand with the expectations of rival analytical approaches. Systematic process analysis requires deep empirical foundations because rival empirical expectations are tested against each other by documenting conforming and non-conforming observations (Hall 2008: 314). For this reason, I have double-checked basic information and collected data from three different types of sources: academic and professional publications on rating; newspaper articles about Thai financial market deregulation; and interviews with experts who represent the financial authorities.4 At the request of our interviewees, the matters discussed are used and quoted in the text anonymously.

This article assumes that the clue for understanding institutional change is the exploration of preference change. The reason for this is that material interests change little and preferences translate material interests (such as the profit interest of banks) into action. Following Frieden (1999), Vogel (1999), Hall (2005:), Woll (2005) and others, I claim that there is a difference between material interests and preferences and that it is useful to assume interests are fixed and to derive them from economic theory. Interests (which can be multiple) are the (mostly economic) values and benefits that actors pursue; their preferences define the way they order the possible outcomes of their behavior. In this study, 'interests' are defined as banks' profit-seeking motives. Banks' preferences reflect their ranking of the governance mechanisms that they can use in the assessment of creditworthiness to maximize their profits – namely how they order the use of networks, firm-hierarchy and the market.

The focus on preferences means that, in contrast to most other institutional analyses, which, following Hall and Taylor (1996), use the trinity of rational choice, historical and sociological institutionalism, this article replaces the rational choice approach with 'behavioral institutionalism'. The reason for this is that rational choice institutionalism has problems in analyzing preference change and processes of preference formation. Historical, sociological and behavioral institutionalisms treat preference change as an empirical question because they see the formation of preferences as endogenous. Rational choice institutionalism views preferences as exogenous and given, and it is only an exogenous shock (thus a heavy and rapid systemic transformation) that is expected to change them (e.g., Hall & Taylor 1996; McDermott 2004; Hall 2005; Fioretos 2011; for an exception, see Greif & Latin 2004). In this approach, 'institutional change happens only when ceteris is no longer paribus, that is, when shocks exogenous to the system alter the context' (Hall 2010, emphasis in original; similarly, see Mahoney & Thelen 2010).

This article has to note that the three strands of institutionalism – historical, sociological and behavioral – share two points. First, they contend that there is an interactive relationship between actors, institutions and the decision-making situation. And second, they analyze processes of preference formation in an inductive manner and allow for endogenous preference change as a driver of institutional change. However, despite these commonalities the three institutionalisms are nevertheless quite distinctive in their understanding of Institutions and how endogenous preference change comes about (see also Table 1). While historical institutionalism has a political and historical understanding of actors' decision making and preferences and sociological institutionalism highlights normative and cognitive dimensions, behavioral institutionalism views institution-building and endogenous preference change from the perspective of economic decision making.

Table 1 Difference between Historical, Sociological and Behavioral Institutionalism

	Historical institutionalism (power)	**Sociological institutionalism (diffusion)**	**Behavioral institutionalism (prospect theory)**
Institutions	Institutions reflect power relationships and are instruments of power redistribution	Institutions not only specify 'what one should do', but also 'what one can imagine oneself doing' (Hall & Taylor 1996: 948)	Institutions are choice architectures
Endogenous preference change	Conditioned by existing institutions, power struggles and strategic interaction	Conditioned by cognitive and normative dimensions of existing institutions and decision-making situations	Conditioned by actors' framing of relative losses and gains

Historical institutionalism conceptualizes institutions from a power-distributional perspective and views preferences as conditioned by existing institutions and power struggles as well as strategic interaction (Thelen & Steinmo 1992; Hall 2010; Jackson2010: 68).6 Sociological institutionalism follows a 'cultural approach' by stressing the cognitive dimension of institutions and preferences (Hall & Taylor: 1996). Assuming the logic of appropriate behavior (Hall & Taylor 1996: 947–949), institutions not only specify 'what one should do' but also 'what one can imagine oneself doing', with the result that cognitive and normative dimensions also affect actors' preferences (Hall & Taylor 1996).

Behavioral institutionalism loosens the 'calculus' approach of rational choice institutionalism, which, according to Hall and Taylor (1996), assumes that actors maximize their material interests by a specific and fixed 'preference function' and defines institutions as coordination mechanisms sustaining particular equilibrium (similarly, see Mahoney & Thelen 2010). Instead of stringent calculus, behavioral economics assumes bounded rationality – thus, that rationalist calculations are limited by psychological effects such as 'loss aversion' and 'framing effects' or 'hyperbolic discounting' (Shepsle 2006; similarly, see Posner 1998; Levi 2009).As a result, in contrast to rational choice institutionalism, and in line with sociological and historical institutionalism, behavioral economics (prospect theory) acknowledges that endogenously generated preference shifts are possible (McDermott 2004): Preferences and their formation are not deductively conceived but, as in historical and sociological institutionalism, they are treated as empirical questions. What distinguishes behavioral institutionalism from historical and sociological institutionalism is that this approach claims it is actors' framing of relative losses and gains which make their preferences change.

Historical institutionalism views preference change as a function of existing institutions, strategic interaction or constellation of actors while sociological institutionalism points to the effect of appropriate behavior. Behavioral institutionalism by contrast links endogenous preference change to how actors frame the relative losses and gains of their behavior. Thus, behavioral economics allows investigating economic reasons for preference shifts. FICO has disclosed the main factors of credit scores allocation as the following (http://www.myfico.com/crediteducation/ hatsinyourscore.aspx):

A consumer's payment history is accounted 35% of total scores. This concerns on late payments, overdue, missing the payments, and default.

A consumer's debt burden is accounted 30% of total scores. This counts the number of credit accounts with owed amounts comparing to credit available amounts. It can be called debt-to-limit ratio. The high ratio indicates the high risk that will get low scores.

A consumer's credit history is accounted 15% of total scores. This is the length of time that a borrower has been using and repaying the credit. It may be an average age of each credit account and the age of oldest credit account.

A consumer's credit usage is accounted 10% of total scores. This refers to types of credit used by a consumer such as mortgage, revolving credit, auto loan, and studying loan. A consumer who has no credit cards is weighted lower scores than a consumer with credit cards.

A consumer's new credit account application is accounted 10% of total scores. hen a consumer applies for many credit cards or loans that are recorded and displayed on personal credit reports within 12 months. This may be lower the scores.

All these above factors are FICO's basic credit scoring considerations. Here, FICO credit scores focus on default risk of a consumer. So, FICO credit scores are widely uses by the lenders. Anyhow, there are many details to evaluate a consumer's creditworthiness. But the details are secret!! Each credit assessment organization always develops its own credit scoring models and calculating methods. Based on many researches from both academics and financial industry found that there is no single technique proven as superior credit evaluation for the most accuracy credit risk prediction. However, the more credit information of a consumer will help a lender to facilitate in screening the potential borrowers. In business practice, a high credit scoring customer is able to lend at a lower interest rate than a low credit scoring customer. Moreover, a high credit scoring customer is also able to have a longer credit term as well as a larger credit line comparing to the low credit scoring customer.

The major credit bureaus do much on credit reporting more than credit scoring. The credit bureaus work as credit information providers, not credit scoring evaluators. Therefore, banks, credit card issuers, and lenders have their own proprietary credit scoring models. They also have their own interpretation of a credit score that will vary by lender, industry, and the economy as a whole. Even though the same banking sector, each bank has its own credit granting criteria. Normally, smaller banks will have the easier credit granting criteria than the larger banks. However, there is a set of basic credit scoring assessments that are used by the bankers, especially the mortgage loans consideration. The basic set of a debtor's credit assessments is called 6 Cs which are as the following (http://www.cbmfoundation.org):

Character - Paying bills on time and meeting financial obligations are signs of good character.

Capacity - Repaying a loan or other financial agreement (enough cash left over after paying fixed monthly expenses to repay loan, the stability of employment or business)

Capital - Subtracting all your debts from your assets, including any property.

Conditions – Focusing on the intended purpose of the loan and considering the economic climate and market conditions.

Collateral – Backing up for a payment of a debt by any property or possession.

Common Sense – Reflecting good reasons for answering the questions.

Recently, the Bank of Thailand and the Finance Ministry would permit the non-bank institutions to provide personal credit loans which are called “Nano Finance” in order to get rid of the loans from outside the financial system (http://www.nationmultimedia.com/business/Nano-finance-regulations-approved). The Bank of Thailand found that the grass-roots people have a harder time to access the capital in financial system. At the same time, most of Thai commercial banks have high costs to lend to these groups of people who need a small amount of loan. Anyhow, there are a large number of people who need loans but they cannot meet the banks’ lending criteria. Consequently, they borrow from outside the financial system where there is no law protection. This is the main reason to issue Nano Finance that is expected to ease the problem of unlawful loans in Thailand.

Firstly, they can apply the 6Cs to develop the personal credit scoring assessments which should focus on the first 2Cs: Character and Capacity. The good potential borrower’s character is to measure his past ability to pay debt which may refer to credit bureaus’ information. If there is no any historical credit payment records, the lender should interview each borrower. The specific set of interview questions should be used as the standardization. The main questions should be related to each borrower lending and payments history, for example:

Have you ever lent money from other people? If yes, how much it was? How you spent it?

In the past, how you paid off the loan(s)? (amount and timing of payments)

How many sources of loans you have at present? And how you plan to pay off the loan(s)?

The lender can weigh the credit scores referred to FICO’s credit scores allocation which is accounted 35% for payment history and 15% for credit history. Then, the lender should allocate marks on each question up to 50 marks for payment and credit history. The good potential borrower’s capacity is measure his ability to pay debt in the future that should focus on a borrower’s job stability, income, and income sufficiency. Most of Nano’s borrowers are self-employed that may not have any official report of his job position, monthly income, and extra earnings. Again, the borrower’s interview will be the only practical tool for data collection. Then, the specific set of questions for assessing the borrower’s ability to pay off loan is a must!! These specific questions should concern on the following information:

What is your business?

Where is located?

When is your business operating hours?

Why you do this business?

How you operate your business?

How much is your daily income and daily expenses?

How you plan to use this requesting loan? And how you plan to pay off this requesting loan?

The lender can also weigh the credit scores as FICO's that is accounted 30% for consumer's debt burden and 10% for credit usage. The rest of 10%, we may count for common sense that reflects the borrower's wise decisions to answer the questions. The lender should allocate the marks for each question up to another 50 marks for the borrower's ability to pay off the loan in the future.
Next, the lender must consider on the cut-off criteria that provide only 2 alternative decisions:

Yes : The borrower who passes the cut-off criteria is granted for a personal loan.

No : The borrower who fails the cut-off criteria is declined for a personal loan.

FICO's credit scores model has no exact cut-off criteria. FICO has the guidelines for good score of above 720 and bad score of below 600. The range of FICO credit scores are 300 – 850 which the average credit score is somewhere around 680 (http://www.investopedia.com/erms/f/ficoscore.asp). As FICO guidelines, the lender can determine the cut-off criteria as percentile methods which can be calculated as the follows:

Good credit score = 720/850 = 84.7% and above

Bad credit score = 600/850 = 70.6% and below

Here, the lender can set the cut-off criteria at 71% of total credit scores. Then, the lender should consider on credit line (lending amount), credit term (lending period), and lending interest rate. The good potential borrowers are rated over 85% that can get the maximum credit line and credit term depending on the lending purpose with a lowest interest rate charge. The average range of borrowers who are rated between 71% - 85% can get the normal credit line and credit term with an average lending rate charge.

Table 2 The Recommend for Charging Interest Rate, Amount of Loan, and Credit Term

Credit Scores	Interest Rate Charges	Amount of Loan	Credit Term
96 – 100	30%	100,000 baht	24 months
91 – 95	31%	90,000 baht	24 months
86 – 90	32%	80,000 baht	24 months
81 – 85	33%	70,000 baht	12 months
76 – 80	34%	60,000 baht	12 months
71 - 75	35%	50,000 baht	12 months

The lender may offer the interest rate discount between 1% - 3% as a reward for a good practice borrower who pays the installments and paying off the loan on time. The key success for small lending loan is the frequency of following up each borrower's payments. So, the lender should arrange the payment methods to match the borrowers' behaviors and should provide the variety payment channels.

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