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CONSUMER LENDING BUSINESS PROCESSES FOR BANKING AND NON-BANKING FINANCIAL INSTITUTIONS: CORE DIFFERENCES

The article explores the fundamental distinctions between banks and non-bank financial institutions in the consumer lending sector, emphasizing Make-and-Sell (M/S) and Sense-and-Respond (S/R) business strategies. To define these strategies, four key criteria were analyzed: "profit focus," "know-how," "general business process," and "organizational priority." Banks traditionally adopt a structured M/S approach that prioritizes long-term planning and standardized processes. In contrast, non-bank financial institutions use the adaptive S/R strategy, characterized by flexibility, modular customization, and rapid innovation. These institutions emphasize agility in responding to customer needs and utilize advanced technologies to optimize their processes.

The research highlights how these differences impact customer relationship management (CRM) processes and credit risk assessment. Banks primarily rely on traditional credit scoring models, classifying borrowers into "good" or "bad" categories based on their delinquency. In contrast, non-bank financial institutions adopt a segmented approach based on profitability. This segmentation, represented through the Whale curve, allows non-bank institutions to identify high-profit clients and tailor strategies to maximize returns. The difference is also present in the usage of credit bureau data.

The findings underscore the dual impact of fintech innovation on financial stability. While non-bank financial institutions have expanded access to credit and driven innovation, they operate in higher-risk environments with less regulatory oversight, contributing to potential financial instability. Conversely, banks face increasing competitive pressures, necessitating the adaptation of rigid traditional processes to remain viable in this evolving landscape.

Keywords: financial and economic instability; bank loan; bank; financial stability; banking system; loan price; fintech.

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БІЗНЕС-ПРОЦЕСИ СПОЖИВЧОГО КРЕДИТУВАННЯ БАНКІВСЬКИХ ТА НЕБАНКІВСЬКИХ ФІНАНСОВИХ УСТАНОВ: ОСНОВНІ ВІДМІННОСТІ

У статті досліджуються фундаментальні відмінності між банками та небанківськими фінансовими установами в секторі споживчого кредитування, розглядаючи бізнес-стратегії «зробити і продати» (M/S) і «відчути та відреагувати» (S/R). Щоб визначити ці стратегії, було проаналізовано чотири ключові критерії: «орієнтація на прибуток», «ноу-хау», «загальний бізнес-процес» і «організаційний пріоритет». Банки традиційно використовують структурований підхід M/S, який надає пріоритет довгостроковому плануванню та стандартизованим процесам. Небанківські фінансові установи, навпаки використовують адаптивну стратегію S/R, яка характеризується гнучкістю, модульним налаштуванням та швидкими інноваціями. Ці компанії мають більшу гнучкість у реагуванні на потреби клієнтів і використовують нові технології для оптимізації своїх процесів.

Дослідження показує, як ці відмінності впливають на процеси управління відносинами з клієнтами (CRM) і оцінку кредитного ризику. Банки переважно покладаються на традиційні моделі оцінки кредитоспроможності, класифікуючи позичальників на категорії «хороші» та «погані» на основі наявності в них простроченої заборгованості. В той же час, небанківські фінансові установи використовують сегментований підхід, сформований на основі прибутковості. Ця сегментація, представлена за допомогою кривої Whale, дозволяє небанківським установам ідентифікувати високоприбуткових клієнтів і адаптувати стратегії для максимізації прибутку. Також відрізняється використання даних бюро кредитних історій.

Отримані дані підкреслюють подвійний вплив інновацій фінтех на фінансову стабільність. Незважаючи на те, що небанківські фінансові установи розширили доступ до кредитів і запроваджують інноваційні підходи, вони працюють у середовищі підвищеного ризику з меншим регуляторним наглядом, що сприяє потенційній фінансовій нестабільності. І навпаки, банки стикаються зі зростаючим конкурентним тиском, що вимагає від них адаптації традиційних процесів для збереження конкурентоздатності.

Ключові слова: фінансово-економічна нестабільність; банківський кредит; банк; фінансова стабільність; банківська система; ціна кредиту; фінтех.

STATEMENT OF THE PROBLEM IN A GENERAL FORM AND ITS CONNECTION WITH IMPORTANT SCIENTIFIC OR PRACTICAL TASKS

Credit markets around the world are experiencing certain transformations. Although banks, credit unions, and other traditional lenders remain the primary sources of financing for companies and households in most

economies, new lenders have recently emerged. This refers to non-bank financial institutions, characterized by the term “fintech”. There is a wide range of causes for their active development, and two main reasons can be identified. The first reason is a significant tightening of the regulatory function in relation to banks after the crisis of 2007-2008. Therefore, financiers were incentivized to switch to this less regulated form of lending. Less regulation is partly due to non-bank financial institutions' lack of a deposit function. The second reason is digitalization and the active use of these technologies in finance. Financial companies are more flexible and adapted in this aspect. A separate, very dynamic sector of fintech is online lending. Digital technologies have made it possible to completely transfer it online and switch to remote interaction with the borrowers.

From the point of view of credit process development, this trend can be considered in the context of adaptation to the needs of borrowers. Adaptation primarily to the segment of short-term loans or payday loans. Getting a loan in a few minutes without leaving home is a substantial market driver. At the same time, the rapid development of fintech has generated an ongoing debate about the financial system's stability. On the one hand, the development of this segment carries an inherent risk. On the other hand, it has become a decisive competitive factor for banks. Banks began to seek ways to develop in this competitive environment actively. However, according to the traditional “competition-fragility” view, increased competition with fintech and among banks leads to potential financial instability.

Indeed, non-bank financial institutions are in a higher-risk segment of the consumer lending market. Firstly, because they actively use various innovative technologies. Secondly, online payday loans are inherently characterized by a higher level of risk. Both factors generate a higher level of financial instability in this segment. In turn, non-bank financial institutions “bite off” some of the borrowers from banks. Banks feel a growing competition and themselves generate an increase in financial instability.

Within the specified framework, our study focuses on one component that also affects the level of financial instability. This component is the organization of business processes in the online payday loan lending segment. Incorrectly structured and inefficient organization of credit processes can increase the risk caused by loss-making loan portfolios. Therefore, the correct organization of lending business processes is an essential factor in the stable development of this segment. One of the problems is the transfer of the banking model of credit business processes to non-bank financial institutions. At the same time, this problem has a reversible character. Rigid, inflexible classical organization of credit business processes in banks' consumer lending complicates their adaptation in a competitive environment.

Thus, the basis of our study was formed by the problem of adapting models of business processes to the specified transformational changes. Within the framework of this task, we complete a comparative analysis of two models of organizing business processes. Such an analysis is important for both non-bank financial institutions and banks. Moreover, this problem is connected with the mentioned financial stability problem.

ANALYSIS OF RECENT RESEARCH AND PUBLICATIONS

The rapidly growing influence of Fintech on the modern financial system is described in the report by Harvard Business Review Analytic Service [1]. The authors analyze the results of a survey of 300 heads of classic financial institutions. Two-thirds of respondents identified fintech development as a threat to the “classics”. The article by G. Cornelli et al. [2] presents the results of an extensive (79 countries) study of fintech development in 2013-2018. Authors found that new digital lending forms are larger in countries with higher GDP per capita. The authors also examine the assertion that fintech credit is a complementary form of credit rather than a substitute for them. In modern publications, much attention is paid to the problem of financial instability associated with fintech development. Q.K. Nguyen and V.C. Dang [3] present the results of similar studies on emerging markets. In particular, they analyzed data from 37 commercial banks in Vietnam. Their research showed that FinTech development negatively affected financial stability and is a factor of instability in the modern financial system. The crucial factor for this is market discipline.

The relationship between fintech and financial stability has been explored in previous research, though the findings remain inconclusive. D.W. Fung et al. [4], using data from listed banks in 84 countries, analyzed the varying impacts of fintech shocks on financial stability when fintech regulatory sandboxes were implemented. Their findings suggest that fintech shocks reduce the fragility of financial institutions in emerging markets but increase fragility in developed markets. However, their study did not address how ongoing fintech development contributes to financial instability following such shocks, leaving unanswered questions about the long-term effects of fintech growth on financial stability. Similarly, S.N. Daud et al. [5], using data from 63 developing and developed countries, observed that fintech generally enhances financial stability and plays a role in promoting it.

It is worth noting that in modern literature, the very essence of financial instability is the subject of research. In the article, M. Dubyna [6] considers theoretical provisions on the essence of financial instability and the features of its formation within the financial system of the country. Attention was also focused on analyzing the definition of “financial stability” and the approaches to studying its nature. The essence of financial instability was investigated based on the theoretical provisions that explain the content of financial instability and its specific features.

In the article, N. Ismayilov [7] describes changes in financial architecture. This paper provides an overview of the fintech market and its impact (actual and potential) on the financial system's architecture based on a comprehensive review of the theoretical and empirical literature. L.O. Prymostka [8] also investigates the factors, forms, and directions of financial sector transformation. M. Dubyna [9] presents an important factor in financial sector transformation.

The main idea of our work is based on applying the adaptive approach to business management presented in S.H. Haeckel's book *Adaptive Enterprise* [10]. In particular, the study divided business management into S/R (Sense and Response) and M/S (Make and Sell) principles. The application was carried out to determine the business processes of consumer lending in non-bank financial institutions and banks.

We also note work by M. van de Ven et al. [11]. In this research-in-progress study, the authors considered KPIs for business models and the development of methods and tools for business model management. Methodological aspects of business process comparison are investigated in the work of A. Syamsiyah et al. [12]. The study [13] provides a full-scale analysis of the extent and nature of current FinTech credit activity. Except for other things, the authors indicate that credit business models are in the early stages of development. And their implementation practices will continue to evolve. Some backgrounds of our approach were presented in our publications [14] and [15].

FORMULATION OF THE ARTICLE'S OBJECTIVES

The purpose of this article is to study the differences between banks and non-bank financial institutions in managing business processes for online consumer lending. It applies an adaptive approach and analyzes conceptual dissimilarities in a credit risk management system based on correlation analysis. The study highlights the differences in credit risk assessment and data mining based on data from credit bureau. The problem of creating inefficient business processes is analyzed as one of the factors of financial instability associated with fintech development.

PRESENTATION OF THE MAIN MATERIAL

1. M/S and S/R business strategies for banks and non-bank financial institutions

S.H. Haeckel, in his book [10], offers the following classification of business strategies: Make-and-Sell (M/S) and Sense-and-Respond (S/R) strategy. The M/S business strategy is for the company to develop a specific product and form sales proposals. The essence of this strategy is to focus on mass production and the sale of relatively identical products to consumers. The S/R business strategy is focused on the dynamic adaptation of its products to changes in demand. In their pure form, strategies are quite rare. However, clearly expressed characteristics of one or another strategy are quite common.

S.H. Haeckel also identified a number of criteria by which the strategies differ [10, Table 1.1]. We applied these criteria to analyze consumer lending businesses of banks and non-bank financial institutions (financial companies). As a result, our analysis allows us to conclude that banks generally use an M/S strategy, while financial companies use an S/R strategy.

As the first criterion, we analyzed "Profit focus". According to Haeckel's approach, the "Profit focus" for the M/S strategy is the profit margin on products. The "Profit focus" of the S/R strategy is the return on investments. Comparing banks and financial companies, we find the following. Banks' income is based on the income from the loan portfolio, which is formed mainly by attracting deposits. Thus, the difference between interest rates on loans and deposits forms the "Profit focus". Even though the margin can be high in emerging markets, it does not provide the same profitability as financial companies can potentially have. Income is achieved through mass. The financial companies cannot attract deposits, and the credit process is carried out through investments (equity or attracted capital). At the same time, the return on investment is not limited. However, it reflects clients' profitability, which can be quite large (this aspect is discussed below).

The second criterion that we will consider is "know-how". According to this criterion, the M/S strategy tends to embed in products, but the S/R strategy supposes embedding in people and processes. Of course, all elements (products, people, and processes) are important elements for the business development of both types of institutions. At the same time, banks focus more on product innovations. The factor for this is, first of all, the mass nature of the "sale" of their products (according to the first criterion). The innovative product will have its consumers, and at the same time, the cross-selling effect will be achieved. In particular, this aspect is discussed in [16]. At the same time, banks have more structured business processes. Also, banks are under strict regulation. Therefore, product development is a systemic business process. The product must comply with regulatory standards. At the same time, fintech lenders have more freedom in implementing innovative products. Their implementation is faster. The sense and response effect is more tied to the creativity of developers.

The next criterion is "General business process". According to Haeckel's approach, the general business process for M/S is the "organization of mass production". At the same time, for S/R, it is a modular customization structure. The move towards modular customization is one way of meeting customer requirements. In this framework, both banks and financial companies tend to modular customization. Banks combine mass production and modular customization at the same time. The number of modules for banks is significantly greater. Competition from fintech was the incentive for banks' introduction of module customization.

The fourth criterion for comparison is “Organizational priority”. According to this criterion, the M/S strategy assumes long-term planning and control over implementing the “sales plan”. At the same time, the S/R strategy assumes the formation of a system of rapid switching between modular customization. In our opinion, banks correspond to this criterion of M/S, while online lenders implement the S/R strategy.

The comparison of the two strategies is not limited to the criteria considered. We focused on them because of their direct link to the organization of business processes. We will consider other criteria related to the information component, leadership, etc., separately in the context of the task under study.

2. Credit CRM-based business processes

In this section, we would like to present a comparative analysis of one of the main business processes of a financial institution – the CRM (Customer Relationship Management) business process. Both banks and non-bank financial institutions have many business processes. However, the difference in the CRM business process, in our opinion, is significant. Transferring business process patterns from the banking segment to the non-bank segment can lead to losses in the lending process. Together, it could lead to financial instability. The relevance of the problem of transferring patterns is explained by the fact that a significant part of financiers in online lending are “originals” of the banking system.

The basis of the difference in the business processes under consideration is the difference in the credit risk of the type “pure risk” – “speculative risk”. This disposition is well known, as shown by the formal definition in [17]. Credit risk management in banks and, accordingly, the business process of issuing loans is associated with the division into two categories: “Good” and “Bad”. “Good” are borrowers who do not have credit delinquency. “Bad” are those borrowers who have credit delinquency. The risk premium is calculated by the share of “Bad” clients. For simplicity, credit management is based on determining the credit scoring¹ cutoff point. This point corresponds to the acceptable risk level. As a result, the CRM business process is based on making an offer to a new client whose score is higher than the cutoff point. However, the interest rate is practically unchanged within a specific credit product. The same approach is applied to existing clients. “Good” borrowers are offered a new loan. In this case, the offer, as a rule, includes loans of a larger amount.

When considering a similar business process for an online lender in the PDL segment, we can find a huge difference in the profitability of “Good” borrowers. Borrowers differ in the frequency of taking out loans, exiting and returning from delinquency, and, to a lesser extent, loan amounts. To visualize this difference, we suggest dividing the loan portfolio into four segments: A, B, C, and D, determined by the Whale curve [15].

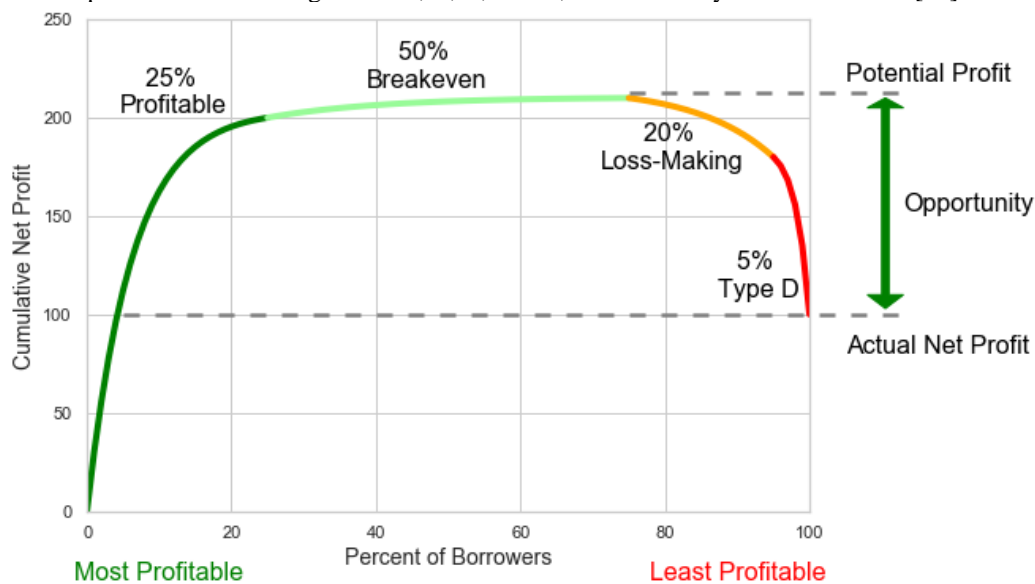


Fig. 1. Whale curve

The main difference with the banking segment is the difference in the profitability of good clients. Loan prices can reach high values. It is not limited economically, but it is limited by regulators.

The CRM business process for the borrowers presented in the portfolio should segment clients into A, B, C, and D at the first stage. Borrowers from the C and D segments should be excluded from further consideration. However, for clients from A and B segments, the business process should include the use of different strategies for continuing credit interaction. This should also influence the distribution of marketing resources.

¹ In this case, we consider scoring as integral scoring, which includes both application data and data from credit bureaus.

Table 1

Description of segments

| | |
|------------------|--|
| <i>Segment A</i> | 25% of borrowers with higher profits are involved here. Borrowers from segment A raise up the Whale curve. The ratio of profit from them can be up (according to the results of our research) 200%-600% compared to the total profit from lending. |
| <i>Segment B</i> | The segment includes borrowers who generate profit ≥ 0 and those not in segment A. There are two types of borrowers here. The first type consists of borrowers who pay off fair and square. The Second type indicates borrowers who previously paid off high but now demonstrate the last loan as C or D. |
| <i>Segment C</i> | Borrowers who are in partial or complete default in the last loan in recurrence loan ordering |
| <i>Segment D</i> | Borrowers with one loan, which is in total default. There are no payments. |

In terms of new clients (borrowers), the business process must be able to identify the potential class to which the client belongs at the very beginning. It requires the creation of 4 scorings that allow the determination of the client's class. Then, the business process can be represented as follows [18].

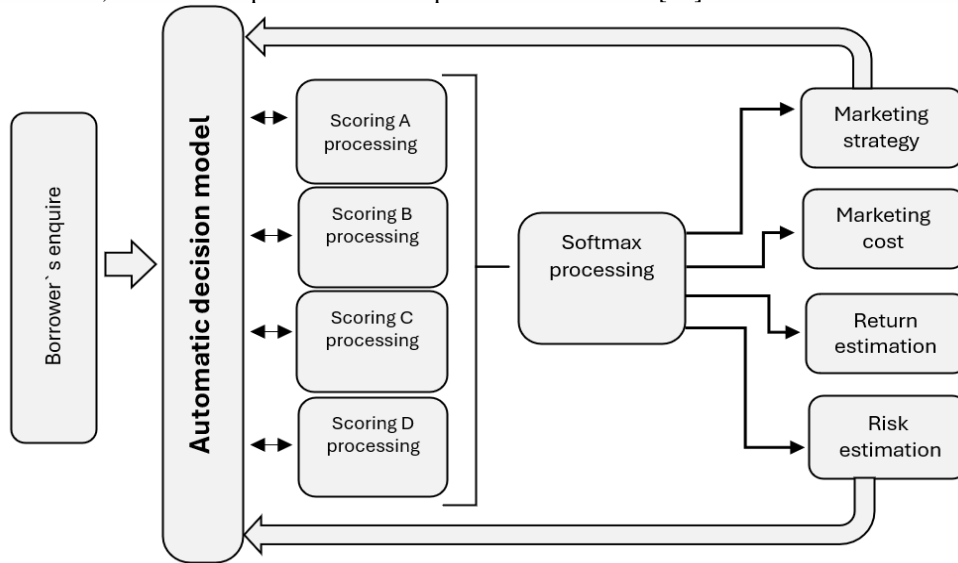


Fig. 2. Conceptual scheme of business process for new borrowers

We want to emphasize the usage of credit bureau information in these business strategies. In the classic banking approach, attention is focused on the presence/absence of delinquency. However, the situation is different in the segment of short online loans of non-bank financial institutions. A fairly large group of borrowers in this segment has several loans. At the same time, they pay for some of them and do not pay for others, which should be considered.

An interesting pattern in the behavior of short-term online loan borrowers is their active search for loans after the end of the current loan. Our study revealed patterns between re-borrowing from a current lender and another based on requests to credit bureaus. The histogram of requests is shown in Figure 3.

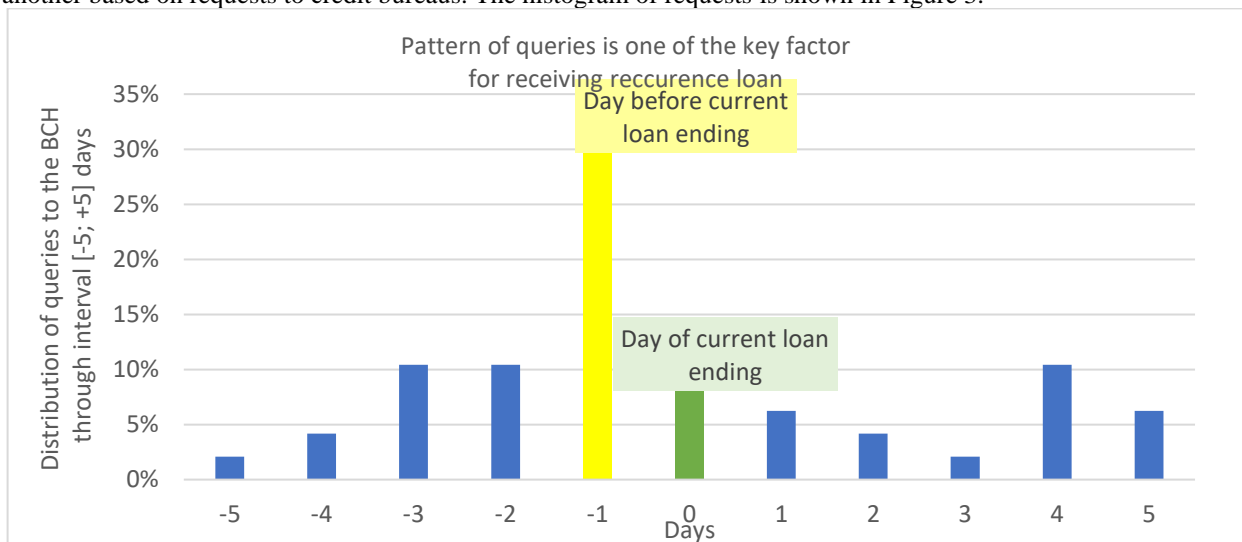


Fig. 3. Histogram of requests to credit bureaus

Thus, it is logical to supplement the CRM-connected business process with requests to the bureau to analyze the client's behavior before the end of the current loan.

CONCLUSIONS FROM THIS STUDY AND PROSPECTS FOR FURTHER RESEARCH IN THIS DIRECTION

The study has provided a comparative analysis of business processes in consumer lending across banks and non-bank financial institutions, highlighting significant differences influenced by used approaches such as Make-and-Sell (M/S) and Sense-and-Respond (S/R). While banks typically adhere to a structured and mass-production-oriented M/S strategy, non-bank financial institutions demonstrate greater flexibility and adaptation using the S/R strategy. These strategic differences are critical in shaping customer relationship management processes and credit risk management approaches.

The findings underscore differences in the decision-making process for issuing new loans. While banks rely on the system of "good" and "bad" borrowers depending on their previous performance and delinquency. Fintech lenders pay attention to loan profitability rather than just focusing on the existence of delinquency, which makes their business process more complex.

Future research should explore deeper integration of adaptive strategies within traditional banking structures and assess long-term impacts on financial stability and borrower outcomes. By continuing to analyze and refine the organization of lending business processes, stakeholders can better navigate the evolving dynamics of the financial sector and promote sustainable growth.

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