



# Who would have thought that punctuation could influence borrowing and lending?

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Peer-to-peer or P2P lending is a way of financing debt online so that people can borrow and lend money without going through a financial institution, like a bank. P2P, also known as social lending or crowd lending, has no need for a middleman and has emerged as an alternative to traditional lending institutions around the world.

An Asian Development Bank Institute study using data from Renrendai, one of the largest P2P lending platforms in the People's Republic of China, found something interesting about the use of punctuation marks in P2P lending.

Who would have thought that the number of punctuation marks used in borrowers' text could influence funding probability, borrowing rate, and default of loans in the peer-to-peer lending market?

Here's ADBI's Bihong Huang, one of the researchers:

**In P2P lending, individual borrowers borrow micro-loans from individual lenders without any collateral or intermediation from banks or financial institutions. Compared with the traditional credit market, P2P lending is easy to access, provides a new investment channel, and makes more efficient use of social funds.**

**But P2P lending also has disadvantages.**

**There are no financial intermediaries to investigate the creditworthiness of the borrowers. Both lenders and borrowers are anonymous and don't have opportunities to meet each other. The lenders make their decisions based mainly on the information provided by the borrowers.**

**The most common form of information disclosure across all P2P lending platforms, aside from gender, race, appearance, and social capital, is the text for the loan descriptions written by borrowers. It turns out that how this text is written plays a role in determining whether the loan will be approved.**

And in most text, punctuation plays a big role. In English text, punctuation is vital to disambiguate the meaning of sentences. For example: "Woman, without her man, is nothing," emphasizes the importance of men, and "Woman: without her, man is nothing," emphasizes the importance of women.

They have very different meanings.

In Chinese, punctuation marks and symbols fulfill the same functions as in any other language. They indicate the structure and organization of the written language, as well as intonation and pauses to be observed when reading aloud.

Bihong Huang says this:

**Punctuation also shows a writer's personal characteristics and has a significant impact on a reader's understanding of written language. In P2P lending, the usage of punctuation reflects the borrower's personality and has a significant impact on the lender's judgement of the borrower's trustworthiness.**

**The PRC has developed the biggest and fastest-growing market for P2P lending. The volume of P2P lending in China was estimated as high as \$40 billion by the end of 2015.**

**Renrendai is one of the largest peer-to-peer lending platforms in the PRC. Founded in 2010, it now has over 1 million members in more than 2,000 cities and counties across the country.**

**The transactions taking place at Renrendai are typical examples of P2P lending. On Renrendai, borrowers can post loan requests with the required information—the loan title, amount to be borrowed, interest rate, description of loan usage, and monthly installment.**

**Renrendai provides verification services with national identification cards, credit reports, and borrowers' addresses. It assigns a credit score to each borrower according to borrowing or lending history and the amount of verified information.**

Renrendai's profit mainly comes from borrowers' closing fees and lenders' servicing fees. To increase the probability of their requests being granted, borrowers may provide personal information such as gender, education, income, marriage status, and so on.

Since the verification and credit rating provided by Renrendai are limited, the lenders must determine how trustworthy the borrowers are from the information disclosed on the platform.

In particular, borrowers are encouraged to say more about the loan's purpose and other personal information in a freeform text field called "loan description."

Once a loan listing is posted, lenders may place bids by stating the amount they want to fund.

With a minimum bid amount of 50 renminbi, a listing typically requires dozens of bids to become fully funded. A listing that achieves 100% funding is a "successful" listing; otherwise, the borrower receives no funding.

The study shows that the number of punctuation marks used in the loan description can predict the funding probability and borrowing rate. An additional 10 punctuation marks in the text is associated with a 9.6% reduction in the funding possibility and 0.56% reduction in the borrowing rate. The more punctuation, the less likely loan approval.

Why is this?

Too many punctuation marks could be interpreted as indicating the borrower's limited self-control and cognitive capacity. Self-control affects his consumption and savings and predicts his behavior. Informal expression in loan descriptions shapes the lender's judgment of the borrower's creditworthiness.

Yet some borrowers continue to overuse punctuation because they lack self-control or are overconfident about their loan requests. They usually overreact to private information, overestimate their judgment, and underestimate the risks. They also tend to believe that the interest rate they set is correct, when in fact it deviates from the real risk.

A large number of punctuation marks in a lengthy loan description also results in information overload, making it difficult for investors to judge the quality of borrowing requests.

Most P2P borrowing requests are posted online and loan descriptions with an excessive amount of punctuation are also full of slang. For example, a borrower might say, "This loan is only for an increased credit limit, I need support from you guys." Using informal expression in a formal lending market reduces the lender's trust in a borrower enormously.

And the more punctuation borrowers use in their loan descriptions, the more likely they will default.

This episode was based on research done for the Asian Development Bank Institute by Xiao Chen, a PhD student at Jinan University, People's Republic of China; Bihong Huang, a research fellow at ADBI; and Dezhu Ye, a professor of finance at Jinan University.

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