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Will CEOs with banking experience lower default risks? Evidence from P2P lending platforms in China

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Abstract: Using a novel dataset of 121 Chinese P2P lending platforms, we investigate the impact of CEOs' banking experience on default risk. The empirical results indicate that CEOs with prior banking experience manage default risk better. Moreover, CEOs' banking experience has a stronger influence on small platforms and in situations where the platforms' depository banks are city commercial banks. Our results indicate that although fintech provides technology to reduce risks, we cannot ignore the constructive role of professional experience in risk management. Thus, investors and regulators in emerging markets should pay attention to managers' financial qualifications, and especially to CEOs' banking experience.

Keywords: CEOs' banking experience, Default risk, Peer-to-peer lending platform (P2P)

1. Introduction

The literature includes diverse perspectives on the effects that executives' financial backgrounds have on corporation performance and risk control. According to higher echelon theory, executives with financial or legal backgrounds typically pay more attention to budget planning and the design of incentive compensation systems, both of which are ultimately beneficial to company development (Hambrick and Mason, 1984). Moreover, Hayes et al. (2007) argue that financially trained managers tend to reduce corporate risk by parceling it out among a sufficiently large number of separate product lines, businesses, or technologies. A more detailed study shows that independent directors (such as CFOs, treasurers, or controllers) with CPA or CFA certificates, or with management experience in financial companies, tend to be more effective in supervising corporations (Agrawal and Chadha, 2005). However, managers with related financial education (such as MBA degrees) tend to follow more aggressive strategies (Bertrand and Schoar, 2003), and firms headed by financial expert CEOs tend to be more leveraged (Custódio and Metzger, 2014). Having managers with these kinds of financial expertise may induce greater risk-taking. In addition, substantial evidence shows that commercial or investment bankers serving on boards tend to invest in projects with good credit prospects but poor investment opportunities (Guner et al., 2008).

We provide a new angle for examining the effects that executives' degrees of financial experience have on firms' risk management strategies in emerging markets. In 2018, China's volume of online loan transactions was the highest in the world, reaching \$178.9

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billion. Since then, China's P2P online lending industry has entered a policy adjustment period, after its periods of initial development, rapid expansion, and risk explosion. The lack of supervision in the P2P industry before 2016 created a large number of illegal platforms. Subsequently, a regulatory policy was promulgated, and regulation was tightened. The problematic chain of platform capital broke, the P2P online lending industries frequently crashed, and a large number of investors gained no returns or lost money.

Using a novel database from the National Internet Finance Association of China (NIFA), we investigate the impact that CEOs with prior banking experience have on platforms' default risks. We manually collect data on 121 P2P Chinese lending platforms that were registered with the NIFA from June 2017 to February 2019. We find consistent evidence that platforms led by CEOs with banking experience perform better in corporate risk management. Furthermore, having managers with banking experience has a stronger positive effect on small-scale platforms than on larger platforms. In addition, if a platform's depository banks are city commercial banks, then the platform's risk of default tends to decrease significantly.

Our paper provides a new perspective on the existing literature by indicating that executives' financial experience positively effects firm operations, especially in an emerging market. In addition, our paper's findings differ from those of the existing P2P lending default risk literature, which has mainly focused on the characteristics of individual loans, e.g., the borrowers' reputation (Ding et al., 2018; Li and Hu, 2019) or loan type (Zhou and Wei, 2018).Our approach is to examine the executives' background characteristics across platforms and examine how the CEOs' banking experience affect firms' operations.

2. Data and specification

2.1. Data

We manually collected data on P2P platforms from the NIFA website (www.nifa.org.cn), WDZJ (www.wdzj.com), and P2P Eye (www.p2peye.com). NIFA is a national association led by the People's Bank of China. Most P2P investors trust information on the NIFA website because it is endorsed by a number of national regulatory commissions. Additionally, WDZJ and P2P Eye are private websites that focus on disclosing information on Internet finance in China. As the registration and information disclosure services were both available starting from June 2017, the period of our platform operations sample runs from June 2017 to February 2019. As some data on executives were not available on the NIFA website, we gained a more complete dataset by adding data from the WDZJ and P2P Eye databases.

The sampled platforms include 121 P2P lending platforms that were registered with the NIFA before February 28, 2019, and the final sample comprises 1,649 observations. Table 1 provides the definitions of the variables and the data sources. To address the banking experience of the CEOs, we set a dummy variable at one when the CEO of the platform used to work in a bank. We proxy for default risk by using the overdue rate. Table 2 reports the summary of these statistics.

2.2. Specification

We examine the impacts that CEOs with prior banking experience have on the sampled platforms' overdue rates, with the following specification:

$$DefaultRisk_{it} = \alpha_0 + \alpha D_i + Z_i\beta + X_{it}\gamma + \theta_t + \varepsilon_{it}$$
(1)

where *i*, *t* are subscripts representing the platform and month, respectively, and *DefaultRisk_{it}* is the dependent variable, measured by the overdue rate (Ioannidou and Penas, 2010). In this paper, we use the monthly overdue rate to proxy for platform risk, for two reasons. First, the literature uses this measure to indicate risks of default in microfinance institutions that arise due to delays in repayment and to high default rates (Setargie, 2013). Second, the fintech sector in China is quite different from those in the U.S. and Europe in terms of risk management. According to a recent report by DBS Group Research, variables such as the amounts of overdue

Table 1

Variable definitions and data sources.

Variables	Definitions	Sources
Overdue	Monthly amount overdue (in%) for each platform	NIFA
Pbank	Dummy variable indicating whether the CEO has prior banking experience	NIFA
		WDZJ; P2P eye
P_age	CEO's age	NIFA; WDZJ; P2P eye
P_gender	Dummy variable indicating whether the CEO is female	NIFA; WDZJ; P2P eye
P_one	Dummy variable indicating whether the director of the board is also the CEO	NIFA
Abank	Dummy variable indicating whether one of the CFOs or CROs has banking experience	NIFA; WDZJ; P2P eye
A_age	The CFO's and CRO's average age	NIFA; WDZJ; P2P eye
A_gender	Dummy variable indicating whether one of the CFOs or CROs is female	NIFA; WDZJ; P2P eye
Num	The total number of executives (including the CEO, chairman, CFOs, and CROs).	NIFA
Bank_d	Dummy variable indicating whether the depository bank of a P2P platform is a commercial bank	NIFA
Boi	The ratio of borrowers to investors (monthly)	NIFA
Ln_curloan	Logarithm of the current loan volume	NIFA
Ln_avgaccloan	Logarithm of the average accumulated loan volume	NIFA
Com_rate	The ratio of the current outstanding amount to the previous lending amount (monthly)	NIFA

Table 2Summary statistics.

Variable	Count	Mean	SD	Min	Max
Overdue	2,047	1.4207	5.3052	0.0000	66.0000
Pbank	2,051	0.3706	0.4831	0.0000	1.0000
P_age	1,934	41.2309	6.7093	29.0000	63.0000
P_gender	2,051	0.2179	0.4129	0.0000	1.0000
P_one	2,051	0.5378	0.4987	0.0000	1.0000
Abank	1,982	0.5414	0.4984	0.0000	1.0000
A_age	1,792	38.5832	6.8495	26.0000	64.0000
A_gender	1892	0.4260	0.4946	0.0000	1.0000
Num	2,051	2.9132	1.3997	1.0000	7.0000
Bank_d	2051	0.5592	0.4966	0.0000	1.0000
Boi	2,051	7.2829	22.3009	- 0.9799	156.9020
Ln_curloan	1,838	9.7193	2.3438	-3.9120	16.3028
Ln_avgaccloan	2,035	11.6693	1.8668	6.8888	17.0492
Com_rate	1,765	-0.1746	1.4070	- 9.8177	2.2854

Note: The data sources include the basic platform data disclosed monthly by NIFA, P2P Eye, and WDZJ. The definitions of the variables are given in Table 1.

Table 3

	(1) Overdue Rate	(2) Overdue Rate
Pbank	-0.470**	-0.779***
	(-2.19)	(-3.34)
P_age		-0.0299
		(-1.58)
P_gender		-1.150***
		(-5.28)
P_one		2.001***
		(8.54)
Abank		0.250
		(1.07)
A_age		0.0934***
		(5.27)
A_gender		1.831***
		(6.46)
Num		0.323***
		(3.50)
Ln_curloan		-0.696***
		(-6.40)
Bank_d		0.573**
		(1.98)
Boi		-0.00484**
		(-2.32)
Com_rate		-0.0638
		(-0.65)
Monthly Fixed Effect	Yes	Yes
Ν	2,047	1,459
R-squared	0.0625	0.2201

T-statistics are in parentheses. ***p < 0.01, **p < 0.05, *p < 0.1.

Table 4 Robustness check.

	(1) Whether a platform is in an abnormal condition	(2) Overdue Rate Drop 35 platforms	(3) 3-month Overdue Rate
Pbank	0.476***	-0.954***	-0.043***
	(5.14)	(-3.10)	(-4.89)
Control variables	Yes	Yes	Yes
Ν	1,459	1,178	1,311
R-squared	0.1684	0.2501	0.130

T-statistics are in parentheses. *** $p\,<\,0.01,\,**p\,<\,0.05,\,*p\,<\,0.1.$

Table 5 Heterogeneous effects.

	Platform size [1] Small platform	[2] Big platform	Type of depository bank [3] City commercial bank	[4] Non-city commercial bank
Pbank	-1.345***	-0.162	-0.611**	-0.822
	(-2.70)	(-0.76)	(-1.99)	(-1.64)
Control variables	Yes	Yes	Yes	Yes
Observations	800	693	806	653
R-squared	0.1634	0.1427	0.3565	0.1808

T-statistics are in parentheses. *** p < 0.01, ** p < 0.05, * p < 0.1.

loans, overdue risk, and accumulated loans are crucial for conducting risk control on P2P platforms in China's fintech sector. D_i is the key explanatory variable, which indicates whether the CEO of platform *i* has prior banking experience. Z_i is the executive-level control variables, including the CEO's age and gender, whether the director of board is also the CEO, the CFO's and CRO's banking experience, and the age, gender, and number of executives. X_{it} are the platform-level control variables, including the depository bank type, the ratio of borrowers to investors, the current loan volume, the average accumulated loan volume, and the ratio of the current compensation amount to the previous borrowing amount. Accordingly, α , β , and γ are the coefficients that reflect the effects on *DefaultRiskit*. Finally, we include month dummies (θ_t) as the time fixed effects, and ε_{it} is the error term.

3. Estimation results

3.1. Baseline results

Table 3 shows the baseline results. Column 1 of Table 3 shows that CEOs with banking experience have a significantly positive impact on controlling default risk, as they reduce the overdue rate by 0.470%. In Column 2 of Table 3, this result still holds when controlling for other traits of CEOs, the characteristics of other executives, and the platform-level variables.²

In addition, we show four robustness checks in Table 4. First, we provide some evidence by using survival analysis. The odds ratio for the variable pbank is 0.476(<1) in Column 1, which means that a CEO with banking experience tends to have a lower likelihood of having platform risks. Second, we drop the 35 platforms that changed their CEOs after their initial stages of establishment. Third, we use a 3-month overdue rate to replace the monthly overdue rate. All these three results are robust to the baseline estimation.

3.2. Heterogeneous effects

Large banks tend to specialize in lending to relatively large firms, and small banks have advantages in lending to smaller firms (Berger and Black, 2011). We find consistent results in Columns 1–2 of Table 5. As most P2P platforms target small business, small platforms are likely to be good at keeping contact with small businesses, to know their demands better, and to better control their probability of default.

As the depository banks of P2P platforms play an important role in risk management (Zhu, 2018), we divide the sample into two types: Platforms with city commercial banks and those with non-city commercial banks. The results are reported in Columns 3–4 of Table 5. The regression results indicate that CEOs of P2P platforms with prior banking experience tend to have lower transaction costs when working with commercial banks, as their management and finance experience are both mainly concerned with microloans. In this regard, the cooperation between city commercial banks and P2P platforms whose CEOs have prior banking experience can help those P2P platforms to control risks.

4. Conclusion

In this paper, we find that platforms run by CEOs with prior banking experience have significantly lower risk of default. The heterogeneous results show that CEOs' banking experience has a stronger influence on small platforms and in cases where the platforms' depository banks are city commercial banks.

Our paper has several implications for policy and investment. First, investors in P2P platforms should consider not just the operational information on the platforms, but also the platform CEOs' professional backgrounds, especially their banking experience. Second, regulators in emerging markets should make guidelines regarding the platform CEOs' qualifications. Not everyone is qualified to lead a P2P lending platform, and managers of such platforms should have related professional experience, such as banking experience.

 $^{^{2}}$ We also use the propensity score matching method to solve the potential endogeneity problem. Due to space limitations, the results from this method are not shown. The details are available upon request.

References

Agrawal, A., Chadha, S., 2005. Corporate governance and accounting scandals. J. Law Econ. 48 (2), 371-406.

Berger, A.N., Black, L.K., 2011. Bank size, lending technologies, and small business finance. J. Bank. Financ. 35 (3), 724–735.

Bertrand, M., Schoar, A., 2003. Managing with style: the effect of managers on firm policies. Q. J. Econ. 118 (4), 1169-1208.

Custódio, C., Metzger, D., 2014. Financial expert CEOs: CEO's work experience and firm's financial policies. J. Financ. Econ. 114 (1), 125-154.

Ding, J., Huang, J., Li, Y., Meng, M., 2018. Is there an effective reputation mechanism in peer-to-peer lending? Evidence from China. Finance Res. Lett. 30, 208–215. Guner, A.B., Malmendier, U., Tate, G.A., 2008. Financial expertise of directors. J. Financ. Econ. 88 (2), 323–354.

Hambrick, D.C., &Mason, P.A., 1984. Upper echelons: the organization as a reflection of its top managers. Acad. Manage. Rev. 9 (2), 193-206.

Hayes, R.H., Abernathy, W.J., 2007. Managing our way to economic decline. Harvard Busi. Rev.

Ioannidou, V.P., Penas, M.F., 2010. Deposit insurance and bank risk-taking: evidence from internal loan ratings. J. Financ. Intermed. 19 (1), 95-115.

Li, J., Hu, J., 2019. Does university reputation matter? Evidence from peer-to-peer lending. Finance Res. Lett. 31, 66–77. Setargie, S., 2013. Credit default risk and its determinants of microfinance industry in Ethiopia. Ethiopian J. Busi. Econ. 3 (1), 1–21.

Zhou, Y., Wei, X., 2018. Joint liability loans in online peer-to-peer lending. Finance Res. Lett.

Zhu, Z., 2018. Safety promise, moral hazard and financial supervision: evidence from peer-to-peer lending. Finance Res. Lett. 27, 1-5.