



Failure To Jettison: The Cost of Labor on the Path to Recovery



Guanmin Liao¹, Xiaoyun Yu², Yaya Yu³, Zihan Zhang¹

¹ School of Business, Renmin University of China, Beijing, China

² Shanghai Advanced Institute of Finance, Shanghai, China ³ Ant Financial, Shanghai, China

The ABFER 12th Annual Conference

INTRODUCTION

■ Zombie firms are detrimental to the real economy growth

- They crowd out their healthy counterparts and distort resource allocation. Nevertheless, zombies are prevalent in both developed and emerging economies.

■ Motivating question

- How to expedite the recovery from financial distress and safeguard firms against slipping into zombies?
- Do labor costs affect the employment decisions of distressed firms and impede the likelihood and speed of distress resolution?

■ China provides a unique setting

- We can identify financial distress based on actual incidences of **bank loan defaults**
- **The 2008 Labor Contract Law** helps to establish causality
- Mandated disclosure on **workforce composition information** helps to investigate how workforce structure affects firm recovery from distress

METHODOLOGY

$$y_{i,t} = \beta_0 + \beta_1 Post_t \times Distress_{i,t} + \beta_2 Distress_{i,t} + \gamma X_{i,t-1} + \alpha_i + \theta_{p,t} + \phi_{c,t} + \epsilon_{i,t}$$

■ $y \rightarrow$ Employment decisions

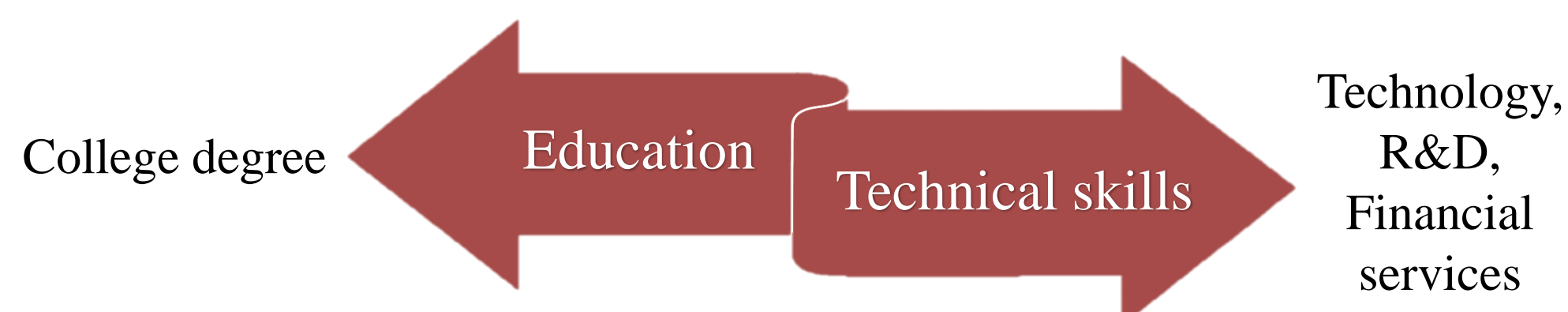
- Employment Growth and Layoff Rate

Total number of employees

Number of low-quality employees

Number of high-quality employees

■ Workforce composition



■ Distress

- Set to one if the firm defaults on its short-term or long-term loans

CONCLUSIONS

■ Distressed firms decelerate the layoff rate of low-quality employees post LCL

■ Following an increase in the cost of laying off employees, distressed firms with a pre-existing larger share of low-quality employees

- Experience a decline in performance and a higher cost of debt financing
- Increase sales of assets and cut wages to a greater extent
- Have a lower probability of survival and a higher likelihood of turning into zombies
- The prolonged recovery process exacerbates the departure of high-quality workers and allows more resources to be sunk into distressed firms
- A larger share of distressed firms crowds out resource allocation to non-distressed local firms

RESULTS

Employment Decisions

Labor Quality Classification:	Education		Technical Skills	
	All Employees	Low-quality Employees	High-quality Employees	Low-quality Employees
Employment Growth				
Distress \times Post	0.054*** (2.94)	0.059*** (2.98)	0.034 (1.43)	0.057*** (2.72)
Layoff Rate				
Distress \times Post	-0.035*** (-2.75)	-0.035*** (-2.72)	-0.019 (-1.30)	-0.036** (-2.55)
Mass Layoff				
Distress \times Post	-0.043*** (-2.90)	-0.040*** (-2.59)	-0.001 (-0.04)	-0.040** (-2.35)

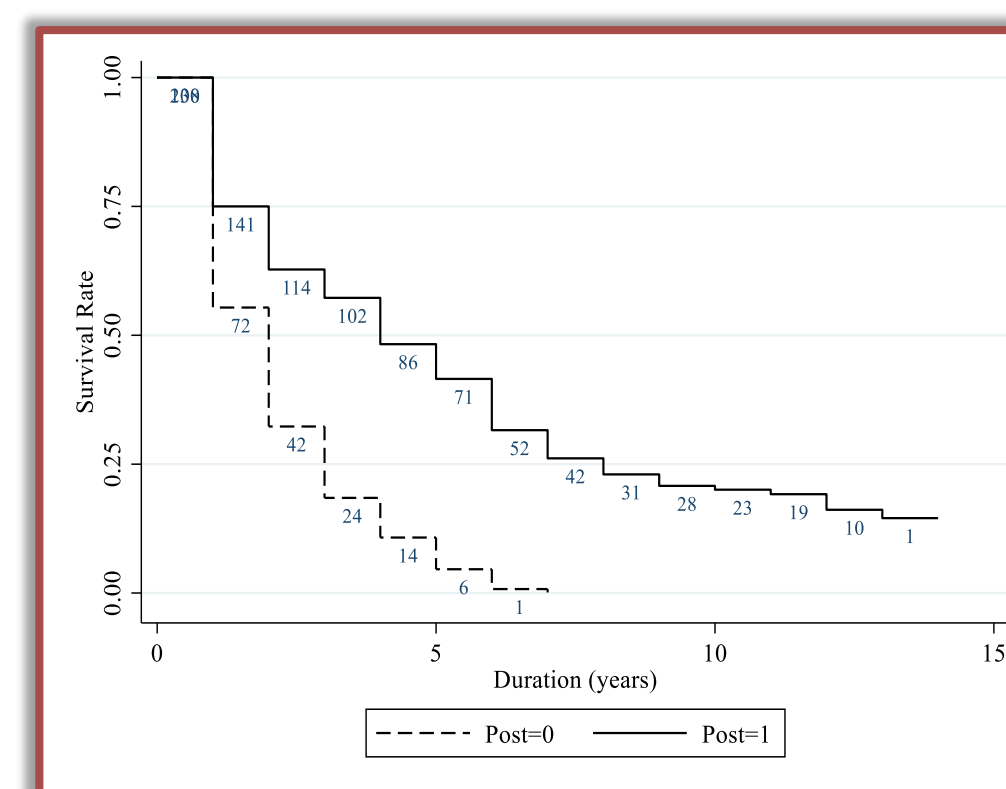
■ Cross-sectional analyses

- Provinces with a higher enforcement efficiency, more frequent labor unrests and ex-ante more employer-friendly local courts

■ Consequences of workforce adjustment

- Higher cost of capital Lower ROA and wage growth
- More asset sales (High Capital-Labor Substitutability)

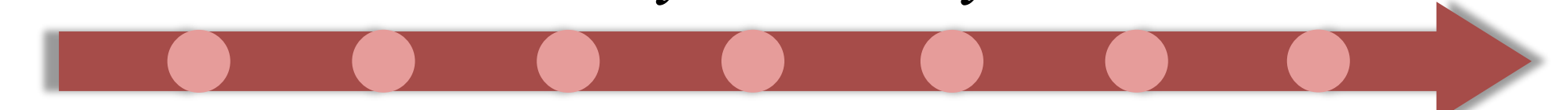
Survival Analysis



Post LCL, financially distressed firms have 64.5% lower hazard rate of **survival** and 1.2 times higher hazard rate of **becoming zombies**

Particularly pronounced among firms with a workforce comprised mostly by **less skilled workers**

Delay in Recovery



■ The longer the firm stays in financial distress

- The lower the fraction of high-quality employees remaining in the firm
- The more government subsidies it absorbs

Spillover in Non-Distressed Firms

Labor Quality Classification:	Education		Technical Skills
	Government Subsidies		
Fraction of Distressed Firms	-1.520*** (-6.05)		
Fraction of Low-quality Labor-Intensive Distressed Firms	-1.433*** (-4.01)	-1.400*** (-3.88)	
Bank Loans			
Fraction of Distressed Firms	-0.100* (-2.83)		
Fraction of Low-quality Labor-Intensive Distressed Firms	-0.108** (-2.52)	-0.117*** (-2.89)	
Financial Constraint			
Fraction of Distressed Firms	4.754* (1.78)		
Fraction of Low-quality Labor-Intensive Distressed Firms	5.582* (1.95)	4.875 (1.47)	
TFP			
Fraction of Distressed Firms	-0.355*** (-3.42)		
Fraction of Low-quality Labor-Intensive Distressed Firms	-0.495*** (-3.93)	-0.490*** (-3.85)	

■ References

- Acharya, V. V., Eisert, T., Eufinger, C., & Hirsch, C. (2019). Whatever It Takes: The Real Effects of Unconventional Monetary Policy. *Review of Financial Studies*, 32(9), 3366-3411.
- Dessaint, O., Golubov, A., & Volpin, P. (2017). Employment protection and takeovers. *Journal of Financial Economics*, 125(2), 369-388.
- Falato, A., & Liang, N. (2016). Do Creditor Rights Increase Employment Risk? Evidence from Loan Covenants. *Journal of Finance*, 71(6), 2545-2590.
- Hu, Y., & Varas, F. (2021). A theory of zombie lending. *Journal of Finance*, 76(4), 1813-1867.
- Simintzi, E., Vig, V., & Volpin, P. (2015). Labor protection and leverage. *Review of Financial Studies*, 28(2), 561-591.