

1145-91-1624 **Maxim Bichuch** and **Ke Chen*** (kchen78@jhu.edu). *Systemic Risk: the Effect of Market Confidence*. Preliminary report.

In a crisis, when faced with insolvency, banks can issue shares/sell their treasury stock in the stock market and borrow money in order to raise funds. We propose a simple model to find the maximum amount of new funds the banks can raise in this way. To do this we incorporate market confidence of the bank together with market confidence of all the other banks into the overnight borrowing rate. Additionally, for a given cash shortfall, we find the optimal mix of borrowing and stock selling. We show the existence and uniqueness of Nash equilibrium strategy for all these problems. We then calibrate this model to market data and conduct an empirical study to assess whether the current financial system is safer than it was before the last financial crisis. (Received September 24, 2018)