









Secondly, comparing the results of regression two and three, we find that the fitness of regression has been greatly improved, if taking the inefficiency term into growth equation. We can conclude that the impact of efficiency of banking system on regional economic growth is at least nonnegligible in this respect.

Finally, we look into the impact of other financial, control variables on economic growth. In light of Table 2, we find that, in China, human capital and non-state-owned economy all exert strong and positive influence on regional growth, i.e. the bigger the stock of human capital in a region and the proportion of the loans granted to the private economy, the higher is the economic growth rate for that region. Moreover, the coefficient of  $\ln(CENT)$  is positive, showing that the structure of banking system can also do with regional economic growth. To be specific, the bigger the proportion of loans issued by middle-sized non-state-owned banks in total loans for a region, the faster that region grows. A recent research by Chi guotai, Sun xiufeng and Lu dan(2005) shows that, in China, the average efficiency of non-state-owned banks outweighs that of 4 big state-owned banks. So, the conclusions reached here indirectly demonstrate that higher efficiency of banking system indeed does good to economic growth. It should be mentioned that the efficiency of judicial system saliently affects regional growth, and the estimated coefficient of  $\ln(LAW)$  is significant in most cases. In regression eight, the fitness of regression is improved greatly instead, after excluding this variable. This could mainly be expounded by the facts that, in China, the efficiency of judicial system and the arrangement of it differ little across regions. In addition, the estimated coefficient of  $\ln(TRADE)$  is negative, in contrary to extant theories' prediction, and further explanations are needed, which are not included in this paper.

## V. The Conclusion

The research in this paper empirically investigates the impact of banks' ability in optimizing credit allocation on

China's regional growth rate. The conclusion is that, in respect to the role of facilitating the economic growth, the banking system of China not only has the capital accumulation effect, but also demonstrates the credit allocation effect. In addition, we find that in regions where law enforcement is more efficient, the effect of banking system on economic growth is more salient.

Note:

This paper is an updated version of our previous working paper.

## References

- [1] Altunbas, Y., Gardener, E., and Moore, B. (2001). Efficiency in European Banking. *European Economic Review*, 45, 1931-1955.
- [2] Berger, G. N. (1993). The efficiency of financial institutions: a review and preview of research past, present and future. *Journal of Banking and Finance*, 17, 221-249.
- [3] Caselli, F., Esquivel, G. and Lefort, F. (1996). Reopening the convergence debate: A new look at cross-country growth empirics. *Journal of Economic Growth*, 1, 363-89.
- [4] Chi guotai, Sun xiufeng and Lu dan(2005). The empirical investigation into the cost efficiency of commercial banks in China. *The Economic Research Journal*, issue 6.
- [5] Diamond, D. (1984). Financial intermediation as delegated monitoring. *Review of Economic Studies*, 51, 647-63.
- [6] Ferri, G. and Mattesini, F. (1997). Finance, human capital and infrastructure: an empirical investigation of post-war Italian growth. *Banca d'Italia, Temi di Discussione*, 321.
- [7] Goldsmith, R. (1969). *Financial Structure and Development*. New Haven.
- [8] Islam, N. (1995). Growth empirics: A panel data approach. *Quarterly Journal of Economics*, 110, 4, pp. 1127-70.
- [9] Jondrow, J., Lovell, C., and Schmidt, P. (1982). On the estimation of technical inefficiency in the stochastic frontier production function model. *Journal of Econometrics*, 19, pp.233-38.
- [10] Kalirajan, K. and Shand, R. (1999). Frontier production functions and technical efficiency measures. *Journal of Economic Surveys*, 13, pp. 149-72.