## OPTIMIZATION CONTROL OF BANK'S CAPITALIZATION AS A FACTOR OF FINANCIAL SAFETY

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A number of economic crises of the last five-year period clearly showed the vulnerability of the global financial system and particularly the banking sector. As a rule, the banking crisis, as it was in the U.S. and Russia is a liquidity crisis. Taking into account the special role of the banking system namely the investment of accumulated funds in the real economy, it is reasonable to assert the bank is systemically important element in the economy of any country's financial development. The banking system as a whole acts as a catalyst of economic development, investing credit resources, the banking system contributes to the development of production, industry, commerce and so on. The emergence of the crisis (credit crunch) in the banking sector is a threat to national safety.

One of the main reasons that pose a threat to the banking sector is the low level of capitalization. A significant factor in increasing the bank's capitalization is its profit. Profit - these are funds that have an impact on the fundamental parameters of the bank's capital adequacy and implementation of reserve requirements. So, before the bank's management faces the task of such an embedding (management of cash funds) funds that would ensure achievement of the Central Bank regulations, and expanding the resource base. This problem must be solved construction management investment funds, based on the principle of the optimum. Such an optimum in the management of market capitalization can be achieved using dynamic programming. In fact, the bank at a predetermined point, taking into account the profit function, we choose the control that allows you to achieve a level of profitability meets the specified criteria. Defining at each step the optimal control at the end of the process, we obtain the vector of optimal controls and income of the bank.

It can be argued that the creation of optimal controls in the way of enlarging the resource base is the way the financial safety of bank.

## References.

- 1. Senchagov V.K. The economic safety of Russia. Moscow: Delo, 2005. 896 p.
- 2. Wentzel E.S. Elements of dynamic programming. Moscow: Nauka, 1964. 176 p.