The research project is focused on development of new methods of probabilistic forecasting in macroeconomics and finance. New methods for dealing with forecast uncertainty by means of co-called forecast pooling make use of the idea that the it is not necessary clear which model provides best forecasts at a given time. Moreover, it might change as e.g. economics conditions evolve. This has important implications for analysis of forecast uncertainty. However, all modern application of statistical methods aiming at proper description of uncertainty as to future economic quantities are technically advanced very demanding in terms of computational power. The project deals with the question of design of optimal methodology (available to practitioners) for applications describing uncertainty of macroeconomic forecasts or risk assessment in financial and macroeconomic analyses. Better description of the forecast uncertainty (in macroeconomics) might result in improvements in economic policy making as well as might be important for understanding of the influence of uncertainty on the whole economy. It might also be possible to develop better models of prediction of changes in business conditions. Moreover, improved methods of risk assessment are important for analyses of financial stability and developments of procedures (and regulations) that are important for stability of the banking system and the financial system as a whole. Such issues are increasingly important as the global financial linkages are becoming stronger. The problems are of great practical importance (which is rather obvious after the global financial crisis).