Topics of State Doctoral Examination valid from January 1st 2013

Economic Theory
Economics

Dynamic Models in Economics – Selected Issues

1. Intertemporal Model of Capital Assets Prices: stochastic discount factor, CCAPM, linkages to traditional portfolio selection models, i.e. Sharpe-Lintner-Mossin's and Merton's model

2. Intertemporal Model of Interest Rate: stochastic discount factor, models of term structure of interest rates, effects of changes in interest rate on economic agents behavior

3. Models of Derivative Assets Prices: model of Black and Scholes, model of Cox and Rubinstein, principles of risk-neutral pricing, model of Black, Derman and Toy, model of Ho and Lee

4. Financial Market Effectivity: key concepts, hypotheses testing, financial assets prices and macroeconomic variables within intertemporal models, e.g. MIU and CIA model, „bubbles“ on financial markets

5. Simulation Models: key mathematical and statistical concepts, use of simulation models for modeling capital assets prices and interest rates, use for modeling prices of derivative instruments


7. Dynamic Models of Exchange Rate: traditional parity conditions and hypotheses testing, monetary models, Dornbusch's model of overshooting, exchange rate within Obstfeld and Rogoff's model

8. Dynamic Models of Current Account: traditional income, exchange rate and monetary mechanisms of current account balancing within dynamic context, intertemporal models of current account, effect of productivity shocks on current account


10. Dynamic Models of Business Cycles: basic RBC model, formulation of new keynesian intertemporal model of inflation targeting for small open economy, monetary and fiscal policy analysis

Literature:

VYSOKÁ ŠKOLA EKONOMICKÁ V PRAZE


Questions 1 – 5


Questions 6 – 10


In the follow-up to the subject IT_910 Research Methods for Managers

1. Scientific knowledge and scientific thinking: Critical thinking, relativity in scientific work, moral assumptions for scientific work.

2. Approaches to scientific examination: normative and descriptive approach, exploratory and explanatory research, positivism, constructivism, and phenomenology.

3. Research questions and hypotheses: descriptive, explanatory, and prediction questions, investigative pentagram, hypothesis and its policy formulation.

5. Specifics of research in the area of economics and management: basic and applied research, theory, methodology, methods and techniques, deepnesses and tricks of managerial research.

6. Systems approach to scientific examination: system hierarchy, system complexity, system dynamics, system thinking and scientific paradigm.

7. Models and systems modeling: mental and explicit models, mind maps, model bias, validity and reliability of a model.

8. Statistical methods for scientific research: data collection and preparation, hypothesis testing.


10. Citation standards and systems: ISO 690, Harvard style, citation generators, Zotero, etc.

Literatura: