

CERGE-EI

*Charles University Prague
Center for Economic Research and Graduate Education
and
the Economic Institute of the Academy of Sciences of the Czech Republic*



Course Book for the Academic Year 2003-2004 The Fall Semester

Student Affairs Office

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CONTENTS

I. THE STRUCTURE OF PH.D. STUDIES IN ECONOMICS AT CERGE-EI	3
A. Contents and Organization of Graduate Study at CERGE-EI	3
B. Core Study – The First Two Years	3
C. Specialized Study – Third and Fourth Years	3
D. Study Program	4
Preparatory semester	4
First year	4
Second Year	4
II. SYLLABI OF THE FALL SEMESTER COURSES	5
A. First year students	5
MACROECONOMICS I	5
MICROECONOMICS I	6
STATISTICS	8
ACADEMIC WRITING I	9
B. Second year students	10
ECONOMETRICS III	10
ECONOMICS OF TRANSITION I	12
FINANCIAL MARKETS I	16
INDUSTRIAL ORGANIZATION I	17
MONEY AND CREDIT I	18
PUBLIC ECONOMICS	19
ADVANCED ENGLISH COMBINED SKILLS	23
III. CERGE FACULTY MEMBERS TEACHING IN THE FALL SEMESTER 2003	24
Austin Andrew	24
Radim Boháček	24
Libor Dušek	24
Michal Kejak	24
Evžen Kočenda	24
Peter Latham	25
Lubomír Lízal	25
Laura Mentz	25
Daniel München	25
Sarah Peck	25
Avner Shaked	25
Sergey Slobodyan	26
Richard Stock	26
Lawrence Smith	26
Petr Zemčík	26
Kresimir Zigic	26
IV. ACADEMIC CALENDAR 2003-2004	27
V. SCHEDULES FOR THE FALL SEMESTER 2003	28
A. First year students	28
B. Second year students	29

I. The Structure of Ph.D. Studies in Economics at CERGE-EI

The *Center for Economic Research and Graduate Education* (CERGE) is a research and educational institute of Charles University. In close cooperation with the Economics Institute (EI) of the Academy of Sciences of the Czech Republic, CERGE-EI offers a Ph.D. program in Economics, accredited by the Ministry of Education, Youth and Sport of the Czech Republic, to students from the Czech Republic and other Central and Eastern European (CEE) and former Soviet Union countries. Economic research is an integral part of CERGE-EI activities.

A. Contents and Organization of Graduate Study at CERGE-EI

Further details on the program can be found in the handbook for graduate students.

The basic mission of CERGE-EI is to perform graduate studies in Economics and to train future university faculty and researchers and public administration representatives. The main idea of establishing the doctoral program curriculum is to transfer the modern Western system of Ph.D. study in Economics, as it is applied in the United States and some Western European countries, to the local environment and incorporate it into the structure of Czech university education within Charles University. The program offers economic education at a level comparable with world standards directly at Charles University, without the necessity of more expensive study abroad. Besides this fact, the best students may be offered the opportunity to visit (for up to one academic year) an appropriate university in the United States or Western Europe. This experience may enlarge their scope of knowledge significantly.

During the first two years of study courses are taught by the local and visiting faculty. Studies are conducted entirely in English. The duration of the doctoral study is four years. The first two years offer primarily systematic knowledge of theory; for the latter two years the students work on their dissertation. The transfer from study to independent research work is gradual and begins during the second year of study.

B. Core Study – The First Two Years

In the first year of study the students follow a common curriculum designed to provide a strong foundation in Microeconomic Theory, Macroeconomic Theory, Statistics and Econometrics, and Academic Writing. This curriculum is standard for the PhD study in Economics. The study is divided into three semesters: the fall semester (FS), the spring semester (SS), and the summer semester (SuS). In view of the fact that many newly recruited students do not have an extensive background in modern Economics equivalent to "western" standards, and also that their knowledge of Mathematics and English are frequently at different levels, a preparatory semester is organized for potential students. It allows CERGE-EI to provide the students with some basic tools as an introduction to the program and to achieve a standard level of competence.

The second year of formal study at CERGE-EI provides students with the opportunity to investigate more specific fields of interest. Several courses (usually five) are offered each of the two semesters, and the second year students must enroll for a minimum of three, plus a course in English. The students participate in a seminar series and are now expected to begin their own research.

Having completed both the first and second years, students must pass a General (comprehensive) examination. After the first year, the students must pass Microeconomic Theory, Macroeconomic Theory, and Econometrics; after the second year they must show proficiency in at least two specialized fields by passing General (field) exams in their chosen areas of interest.

C. Specialized Study – Third and Fourth Years

During the spring semester of the second year and the fall semester of the third year, the students have to choose the topic of their dissertations. A tentative chair as a supervisor is then assigned. By the middle of the third year (at the latest), they formulate a thesis proposal and public defense is required together with state doctoral examination. For students who passed all General examinations with distinction, the main importance will be placed on the defense of the thesis proposal. Those with less than distinctive examination results can also expect additional detailed questions from respective fields. After having successfully defended the proposal, a three-member dissertation committee is appointed which guides and supervises the study and research work.

At least one member of the dissertation committee has to be an employee of CERGE or EI, and at least one of the members has to be a professor from some other university. Under the guidance of this committee the student works on his or her dissertation. In the fourth year the students present their third year work at the Dissertation workshop and prepare for the defense of the dissertation. The study is concluded by the public defense of the doctoral dissertation.

D. Study Program

Here we present the courses designed for the preparatory semester and the first and second year of study. (One lecture/exercise unit is 45 minutes long.)

Preparatory semester

	(Lecture hours / exercise hours)
Macroeconomics 0	4/2, Exam
Microeconomics 0	4/2, Exam
Mathematics	4/2, Exam
Academic Writing	4/0

Notes: Upon completion of the preparatory semester, the final selection of students is made to enter the doctoral program in the fall, based on final exam results.

First year

Semester	Fall	Spring	Summer
Macroeconomics I, II, III	4/2, Exam	4/2, Exam	4/2, Exam
Microeconomics I, II, III	4/2, Exam	4/2, Exam	4/2, Exam
Statistics	4/2, Exam		
Econometrics I and II (Applied)		4/2, Exam	4/2, Exam
Academic Writing I, II	4/0, Credit	4/0, Credit	

Notes: After completing the first year, each student must pass the General examination in the fields of Microeconomics, Macroeconomics and Econometrics.

Second Year

Semester	Fall	Spring	Summer
Econometrics III, IV	4/2, Exam	4/2, Exam	
Economics of Transition I, II	4/2, Exam	4/2, Exam	
Financial Markets I, II	4/2, Exam	4/2, Exam	
Industrial Organization I, II	4/2, Exam	4/2, Exam	
Money and Credit I, II	4/2, Exam	4/2, Exam	
Public Economics and Finance I, II	4/2, Exam	4/2, Exam	
Academic Writing III		4/0, Credit	
Advanced English Combined Skills	4/0, Credit		
Seminar Course	0/2, Credit	0/2, Credit	
Directed Research			0/2, Credit

Notes: Second-year students choose at least three (exam-ended) courses per semester. The credits for English courses, the Seminar Course and Directed Research are mandatory. The courses cannot be from the same field. Courses offered may differ slightly from year to year, depending on the faculty in residence. After completing the second year each student must pass General exam in two fields. Upon agreement of CERGE-EI, a student may complete part of his/her study at another university - this is valid not only for individual courses, but also for a whole study year.

Topic courses are one semester courses not forming two semester sequence and do not cover comprehensively all material needed for Field General Exam.

II. Syllabi of the Fall Semester Courses

Reading Lists for the Fall Semester are available at www.cerge-ei.cz/reading . Full texts of the articles from the reading lists are also available in PDF format and you can read them by using Adobe Acrobat Reader.

A. First year students

MACROECONOMICS I

	<i>Lecturer</i>	<i>Lecturer</i>	<i>Teaching Assistant</i>
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PART ONE (SLOBODYAN)

Course information

The first part of the first course in the macroeconomic theory sequence will concentrate on developing the tools and concepts necessary to understand the modern macroeconomic theory (discrete time dynamic programming and continuous time optimal control) when uncertainty is not present. The study of specific models will take a back seat to mastering the techniques.

Course outline

Dynamic Programming and Optimal Control.

Ia. Discrete Time Dynamic Programming

SL Chapters 1-4, LS Chapter 2.

Ib. Continuous Time Optimal Control.

BF Chapter 2 and Appendices to Chapter 2

Applications

Ila. Consumption and Savings - Ramsey model

BF Chapter 2, Sections 2.1 – 2.3, 2.5

Ilb. One-Sector Model of Economic Growth

SL Chapter 5.1, 5.4, 5.7, LS Chapter 11.

Ilc. A Tree-Cutting Problem

SL Chapter 5.5.

Ild. Investment with Adjustment Costs

LS Chapter 6.

Readings

BF Blanchard, O. and S. Fisher: Lectures on Macroeconomics. MIT Press, 1989.

LS Ljungquist, Lars, and Thomas J. Sargent: Recursive Macroeconomic Theory. Cambridge: MIT Press, 2000.

SL Stokey, Nancy L., Robert E. Lucas, Jr., and Edward C. Prescott: Recursive Methods in Economic Dynamics. Cambridge: Harvard University Press, 1989.

PART TWO (KEJAK)

Course outline

- Introduction into stochastic optimal growth models growth models - Chapter 2 (S&L)
- Competitive equilibrium with complete markets – Ch. 7 (L&S)
- Ricardian equivalence – Ch. 9 (L&S)
- Asset Pricing – Ch. 10 (L&S)
- shopping-time models - Ch. 17 (L&S)
- costly credit models – Ch. 17 (L&S)

- cash-in-advance models – Ch. 17 (L&S)
- ten monetary doctrines – Ch. 17 (L&S)
- credit and currency models – Ch. 18 (L&S)
- RBC models - Chapter 4 (R)
- money in RBC models – Ch. 2-3 (W)

Requirements and grading

The grade (for this second half of the semester) will be based on the midterm exam (2/3) and occasional home problems (1/3).

Readings

We will use the books below together with journal articles which will be specified in a more detailed syllabus.

(L&S) Ljungquist, Lars and Thomas J. Sargent: Recursive Macroeconomic Theory. MIT Press. 2000

(S&L) Stokey, Nancy and Robert Lucas: "Recursive Methods in Economic Dynamics", Harvard University Press, 1989

(R) Romer, David: "Advanced Macroeconomics". McGraw-Hill, 2nd edition, 2001

(W) Carl E. Walsh: Monetary Theory and Policy. MIT Press. 2000 Blanchard, Olivier J. and Stanley Fischer:

MICROECONOMICS I

	Lecturer	Teaching Assistant
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Office hours		

Course outline:

1. The methodology of economics
 - Positive versus normative economics. "Axioms" of economics. Usefulness of economic approach to studying a wide range of social issues.
2. Consumer Theory
 - The concept of ordinal preferences. Utility function. Indifference curves. Budget constraint. Optimization tools: Lagrange and Kuhn-Tucker conditions, value functions, envelope theorem.
 - Consumer's optimization problem. Income and price change analysis. Income and substitution effects. Marshallian and Hicksian demand functions. Sheppard's lemma. Expenditure function. Duality theorems. Slutsky equation. Elasticities. Equivalent and compensating variations and their applications to welfare analysis.
 - Walras law, weak axiom of revealed preference.
 - Theory of the allocation of time. Theory of taste formation.
3. Theory of the Firm and Production
 - Division of labor. Transaction costs and limits to the size of the firm.
 - Production sets, production functions.
 - Profit maximization, cost minimization. Cost function. Sheppard's lemma. Conditional factor demand.
 - Constant-returns-to-scale technology. Substitution and scale effects.
 - Learning-by-doing
 - Investment decisions of firms.
4. Equilibrium
 - The concept of equilibrium. Price as a transmitter of information.
 - Competitive markets. Partial equilibrium analysis. Free entry and long-run competitive equilibrium. Social optimality of competitive equilibria.
 - Edgeworth box, contract curves, and bargaining.
 - Spatial equilibria with homogenous and heterogenous agents.
 - Market for durable goods and determination of rental vs. purchase prices.
5. Non-competitive market structures
 - Monopoly. Price discrimination. Contestability.
 - Strategic interaction between firms. Reaction functions.
 - Bertrand and Cournot competition.
 -

Requirements and grading:

Problem sets	20%
Midterm	30%
Final	50%

Main Readings:

Murphy, Kevin M: Lecture notes for graduate microeconomics. (available on the course website and in the printed version in the library).

Mas-Collel, Whinston and Green: Microeconomic theory, Oxford University Press 1995.

Other readings:

1:

Friedman, Milton: The methodology of positive economics, in Friedman, M.: Essays in positive economics, U of C Press 1966.

Becker, Gary S.: The Economic Approach to Human Behavior, in Becker, G: The Economic Approach to Human Behavior, U of C Press 1976, p. 3-14.

2:

Becker, Gary S.: A Theory of the Allocation of Time, The Economic Journal, Vol. 75, No. 299. (Sep., 1965), pp. 493-517.

Stigler, George J. and Gary S. Becker: De Gustibus Non Est Disputandum, The American Economic Review, Vol. 67, No. 2. (Mar., 1977), pp. 76-90.

3:

Smith, Adam: Wealth of Nations, chapters 1-3.

Stigler, George J.: The Division of Labor is Limited by the Extent of the Market, Journal of Political Economy, Vol. 59, No. 3. (Jun., 1951), pp. 185-193.

Coase, Ronald H.: The Nature of the Firm, *Economica*, New Series, Vol. 4, No. 16. (Nov., 1937), pp. 386-405.

Pindyck, Robert S.: Irreversible Investment, Capacity Choice, and the Value of the Firm The American Economic Review, Vol. 78, No. 5. (Dec., 1988), pp. 969-985.

Arrow, Kenneth J.: The Economic Implications of Learning by Doing, The Review of Economic Studies, Vol. 29, No. 3. (Jun., 1962), pp. 155-173.

4:

Hayek, Friedrich A.: The Use of Knowledge in Society, American Economic Review, Vol. 35, No. 4. (Sep., 1945), pp. 519-530.

Rosen, Sherwin: Hedonic Prices and Implicit Markets: Product Differentiation in Pure Competition, The Journal of Political Economy, Vol. 82, No. 1. (Jan. - Feb., 1974), pp. 34-55.

Rosen, Sherwin: The theory of equalizing differences, in Ashenfelter and Layard: Handbook of Labor Economics, Vol. 1, North Holland 1985.

5:

Carlton, Dennis and Jeffrey Perloff: Modern Industrial Organization, Addison Wesley 1999, chapters 4-7.

Baumol, William J., John Panzar and Robert D. Willig: Contestable Markets and the Theory of Industry Structure, International Thomson Publishing 1988.

Useful references:

Varian H.R.: Intermediate Microeconomics: A Modern Approach, Norton 1987. (basic-level microeconomics reference)

Schotter, Andrew: Microeconomics. A Modern Approach. 2nd edition. Addison Wesley 1997. (basic-level microeconomics reference)

Weintraub E. Roy: Mathematics for Economists, Cambridge University Press 1982 (math reference).

Chiang, A.C.: Fundamental Methods of Mathematical Economics, McGraw Hill 1988 (math reference).

STATISTICS

	<i>Lecturer</i>	<i>Lecturer</i>	<i>Teaching Assistant</i>
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Course information

The goal of this course is to give students a deep understanding of the statistical theory and practice and to build up a background for econometric analysis. The emphasis of this course is on the principles of probability theory and statistical inference. Aside from theoretical studies, students will make regular use of computers to explore a variety of useful applications.

Course outline

- axiomatic theory of probability:
sample space, sigma-algebra, probability, probability space, conditional probability and independence, law of total probability, Bayes' theorem;
- random variables:
probability distributions, density functions, characteristics of random variables, moment generating functions, Chebyshev's inequality, Jensen's inequality, some classical discrete and continuous distributions;
- systems of random variables:
joint distributions, independence, marginal and conditional distributions, expectations, covariance, correlation, Cauchy-Schwarz inequality, bivariate normal distribution;
- functions of random variables, the distribution of transformations of random variables;
- central limit theorems, modes of convergence of random variables;
- elements of stochastic processes, Markov chains and stochastic calculus (if time allows);
- statistical inference:
sampling asymptotic theory, sampling, sampling distributions, sample moments, laws of large numbers, chi-square distribution, F-distribution, t-distribution, point and interval estimators, method of moments, likelihood functions, properties of estimators, minimum variance unbiased estimation, Cramer-Rao theorem, hypothesis testing, confidence regions, types of error, nonparametric tests, Bayesian inference;
- introduction to linear regression models.

Requirements and grading

Problem Sets and Written Assignments (20%), Midterm Exam (30%), Final Exam (50%).

Readings

Principal textbook:

Mood, A.M., F.A.Graybill and D.C.Boes (1974). Introduction to the Theory of Statistics, McGraw-Hill, Inc.

Other Useful References:

Bickel, P.J., and K.A.Doksum (1977). Mathematical Statistics: Basic Ideas and Selected Topics, Holden-Day, Inc., Oakland, CA.

Casella, G., and R.L.Berger (1990). Statistical Inference, Duxbury Press, Belmont, CA.

Cox, D.R., and D.V.Hinkley (1990). Theoretical Statistics, Chapman and Hall,

Feller, W. (1970). An Introduction to Probability Theory and Its Applications, Vol. 1,2, John Wiley and Sons, NY.

Greene, W.K. (2000). Econometric Analysis, Macmillan, Inc., NY.

Karlin, S., and H.M.Taylor (1975). A First Course in Stochastic Processes, Academic Press, Inc., San Diego, CA.

Kmenta, J. (1986). Elements of Econometrics, Macmillan, Inc., NY.

Lehmann, E.L. (1991). Testing Statistical Hypotheses, Wadsworth and Brooks/Cole, Pacific Grove, CA.

Lehmann, E.L. (1991). Theory of Point Estimation, Wadsworth and Brooks/Cole, Pacific Grove, CA.

Sen, A.V.,M.Srivastava (1990). Regression Analysis: Theory, Methods and Applications, Springer-Verlag, NY.

Øksendal, B. (1998). Stochastic Differential Equations, an Introduction with Applications, Springer-Verlag, Berlin.

ACADEMIC WRITING I

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Course information

The purpose of the course is to begin to prepare students to succeed in the Ph.D. program independently, and to successfully begin Academic Writing 2. This course is based on the first four chapters of the textbook. In addition to this material, there may be other readings and assignments provided by the instructor. The course instructor will provide a more detailed course outline.

Evaluation

Students are evaluated according to their mastery of academic English as well as performance on course assignments. Class participation and attendance may also influence the course grade.

Readings

Giltrow, Janet. *Academic Writing: Writing and Reading Across the Disciplines*, 2nd ed.

B. Second year students

ECONOMETRICS III

	<i>Lecturer</i>	<i>Teaching Assistant</i>
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Course information

This course is a part of the sequence in econometrics. The course will focus mainly on the models that use time series and will review current state of theory and empirical work. The course is an applied econometrics course in nature and therefore it will stress application of the topics into applied research. The course will cover topics listed in the course outline below.

Course outline

Univariate Time Series
Unit Roots and Fractional Integration
Trend Breaks and Structural Change
Multiple Time Series
Cointegration
Unit Roots and Cointegration with Panel Data
Heteroskedasticity
Nonlinear Structure

Requirements and grading

The grade for this applied course will be based on the exam and 5-6 assignments that will require to perform econometric and economic analysis. Evaluation will be proportional.

Readings

The text for the course is

Walter Enders: Applied Econometric Time Series (Wiley, 1995) and

Terence C. Mills: The Econometric Modelling of Financial Time Series (Cambridge University Press, 1994)

Most of the course content will be based on journal papers. A detailed list of required/recommended papers will be distributed in the class.

Campbell, J. and P. Perron, "Pitfalls and Opportunities: What Macroeconomists Should Know About Unit Roots," NBER Macroeconomics Annual, 1991, 141-163.

Cochrane, J., "Comment on Campbell and Perron" NBER Macroeconomics Annual, 1991, 201-210.

Dickey, D. and Fuller, W., "Distribution of the Estimators for Autoregressive Time Series With a Unit Root", Journal of American Statistical Association, 1979, 366(74), 427-431

Diebold, F. and M. Nerlove, "Unit Roots in Economic Time Series: A Selective Survey," in T. Fomby and G. Rhodes, eds., Advances in Econometrics, Volume 8, Co-Integration, Spurious Regressions, and Unit Roots, 1990, 3-70.

Kwiatkowski, D., Phillips, P., Schmidt, P. and Y. Shin, "Testing the Null Hypothesis of Stationarity Against the Alternative of a Unit Root: How Sure Are We That Economic Time Series Are Non Stationary?", Journal of Econometrics, 1992, 159-178.

Nelson, C. and C. Plosser "Trends and Random Walks in Macroeconomic Time Series: Some Evidence and Implications," Journal of Monetary Economics, 1982, 139-162.

Diebold, F. S. Husted and M. Rush, "Real Exchange Rates Under the Gold Standard," Journal of Political Economy, 1991, 1252-1271.

Perron, P., "The Great Crash, the Oil Price Shock, and the Unit Root Hypothesis," *Econometrica*, 1989, 1361-1402.

Zivot, E. and D. Andrews, "Further Evidence on The Great Crash, the Oil Price Shock, and the Unit Root Hypothesis," *Journal of Business and Economic Statistics*, 1992, 251-270.

Perron, P. and T. Vogelsang, "Nonstationarity and Level Shifts with an Application to Purchasing Power Parity," *Journal of Business and Economic Statistics*, 1992, 301-320.

Vogelsang, T. and P. Perron, "Additional Tests for a Unit Root Allowing for a Break in the Trend Function at an Unknown Time," mimeo, Cornell University, 1994.

Vogelsang, T. J. 1997. "Wald-type tests for detecting Breaks in the Trend Function of a Dynamic Time Series," *Econometric Theory* 13, 818-849

Andrews, D. and W. Ploberger, "Optimal Test When a Nuisance Parameter is Present Only Under the Alternative," *Econometrica*, 1994, 1383-1414.

Ben-David, D. and Papell D. 1997. "International Trade and Structural Change," *Journal of International Economics*, 43, 513-523.

Sims, C. "Money Income and Causality", in *Rational Expectations and Econometric Practice (LS)*, R. Lucas and T. Sargent, Eds., 387-404.

Sims, C. "Macroeconomics and Reality," *Econometrica*, Jan. 1980, 1-48.

Taylor, J. "Output and Price Stability: An International Comparison", (Section 1), *Journal of Economic Dynamics and Control*, 1980, 109-132.

Engle, R. and C. Granger, "Co-Integration and Error Correction: Representation, Estimation and Testing," *Econometrica*, 1987, 251-266, also in their *Long-Run Economic...*, 267-276.

Stock, J., "Asymptotic Properties of Least-Squares Estimators of Cointegrating Vectors," *Econometrica*, 55, 1987, 1035-1056.

Papell, D., "Searching for Stationarity: Purchasing Power Parity Under the Current Float", *Journal of International Economics*, 43, 1997, 313-332

Levin, A. and C. Lin, "Unit Root Tests in Panel Data: Asymptotic and Finite Sample Properties," *Discussion Paper 92-23*, University of California, San Diego, 1992.

Levin, A. and C. Lin, "Unit Root Tests in Panel Data: New Results," *Discussion Paper 93-56*, University of California, San Diego, 1993.

Pedroni, P., "Panel Cointegration: Asymptotic and Finite Sample Properties of Pooled Time Series Tests with an Application to the PPP Hypothesis," mimeo, Indiana University, 1994.

Kočenda, E. and Papell, D., "Inflation Convergence Within the European Union: A Panel Data Analysis," *International Journal of Finance and Economics*, 1997, 3, 189-198

Engle, R., "Autoregressive Conditional Heteroscedasticity with Estimates of the Variance of United Kingdom Inflation," *Econometrica*, 1982, 987-1007.

Bollerslev, T., "Generalised Autoregressive Conditional Heteroscedasticity," *Journal of Econometrics*, 1986, 307-327.

Baillie, R. and T. Bollerslev, "The Message in Daily Exchange Rates: A Conditional-Variance Tale," *Journal of Business and Economic Statistics*, 1989, 297-305.

Engle, R. and T. Bollerslev, "Modelling the Persistence of Conditional Variances," *Econometric Reviews*, 1986.

Bollerslev, T., R. Chou and K. Kroner, "ARCH Modelling in Finance: A Review of the Theory and Empirical Evidence," *Journal of Econometrics*, 1992

Kočenda, E.: "Altered Band and Exchange Volatility." 1998, *The Economics of Transition*, 6(1), 173-181

Brock, W., Dechert, W., and Scheinkman, J., 1987, "A Test for Independence Based on the Correlation Dimension," University of Wisconsin at Madison, Department of Economics Working Paper.

Brock, W., Dechert, W., Scheinkman, J., and LeBaron, B., 1996, "A Test for Independence Based on the Correlation Dimension," *Econometric Reviews*, 15, 197-235

Brock, W., D. Hsieh, and B. LeBaron, *Nonlinear Dynamics, Chaos, and Instability*, (MIT Press, 1991). Chs. 2 and 4 and Appendix F.

ECONOMICS OF TRANSITION I

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Course information

Duration: The course is a standard two-semester course, two 90 minutes classes per week plus one exercise session/student seminar presentation.

Contents: Review of theoretical and empirical studies focused on economics of transition. The course is a two semestral one and this syllabus covers the first semester.

Preliminary requirements: Microeconomics, Basic Econometrics

Recommended complementary courses: Industrial Organization, Econometrics

Requirements and Grading

The course will typically consist of traditional lectures and seminar/visiting speaker per week. Lectures will cover up to date papers as well as classical treatments of related topics. There is one midterm and final exam. The students will be asked to prepare presentation of a relevant paper from the transition field.

Grading: Grading will be based on exams, in-class and seminar paper.

Course Outline and Readings

(i) Models of Planned Economies - Classical Literature

a) Literature of a standard view of elementary theory of planning, pre-requisite readings:

Ward, Benjamin: The socialist economy. Berkeley, University of California Press, 1967

Hayek, F.A. (ed): Collectivist Economic Planning. London, Routledge, 1935

Lange, Oskar, and F.M. Taylor (eds): On the Economic Theory of Socialism. Minneapolis: University of Minnesota Press (Reprinted, NY: McGraw-Hill, 1964)

The New Palgrave: Problems of the planned economy

Kowalik, T.: Lange Lerner mechanism

Vohra, R.: Planning

Traditional Topics of Comparative Economics

Koopmans, T.C. and J.M. Montias, On the Description and Comparison of Economic Systems, in A. Eckstein ed., Comparison of Economic Systems, University of California Press, 1971, 27-78

Gregory, Paul and Robert Stuart: Comparative Economic Systems. Fourth Edition, Houghton Mifflin Company, Boston, 1992. (Chapters 1,2, 5, 6, 7, 8, and 15)

Bornstein, Morris: Comparative Economic Systems: Models and Cases. Seventh Edition, Irwin, Boston. 1994. (Chapters 1 and 2)

Hurwicz, L.: The Design of Mechanisms for Resource Allocation, American Economic Review, 1973.

Manove, M.: A Model of Soviet-Type Planning, American Economic Review, 1971.

Ludwig von Mises: Economic Calculation in Socialism, in Bornstein, Morris: Comparative Economic Systems: Models and Cases. Seventh Edition, Irwin, Boston. 1994.

Heal, Geoffrey M., The Theory of Economic Planning, North Holland, Ch. 1-6.

EBRD (European Bank for Reconstruction and development), Progress and patterns in transition, Transition report 2000, pp. 13-29, 49-51, and 53-54.

Stiglitz, Joseph E., Whither Socialism? Cambridge, MA: MIT Press, 1994.

Kornai, Janos: Socialist Systems. Princeton University Press, 1992.

b) Producer in Planned Environment

Abel, Istvan and John P. Bonin (1990): Behavior of the Socialist firm under Indirect Control. In: Quandt and Triska: Optimal Decisions in Markets and Planned Economies. Westview Press, 1990

Portes, Richard D.: The enterprise under central planning. The Review of Econ. Studies, 36, 1969, no. 2, pp. 197 - 212

Kornai, Janos (1986): The Soft Budget Constraint. Kyklos-Malinvaud

Hlavacek, Jiri (1990): Producer's Criteria in a Centrally Planned Economy. In: Quandt and Triska.

(ii) Labor managed firm

Ward, Benjamin (1958): The Firm in Illyria: Market Syndicalism, *American Economic Review*, 566-89; or chapters 8 - 10 in Ward.

Domar, Evsey (1966) "The Soviet Collective Farm as a Producer Cooperative. *American Economic Review*, 734-757

Prasnikar, J., J. Svejnar, D. Mihaljek and V. Prasnikar (1994): Behavior of Participatory Firms in Yugoslavia: Lessons for Transforming economies. *Review of Economics and Statistics*, 728-740

Spinnewyn, Frans and Jan Svejnar (1990): Optimal Membership, Employment, and Income Distribution in Unionized and Labor Managed Firms. *Journal of Labor Economics*, 317-340

Estrin, Saul and Jan Svejnar (1993): Wage Determination in Labor-Managed Firms under Market-Oriented Reforms: Estimates of Static and Dynamic Models. *Journal of Comparative Economics*, 687-700

Svejnar, J.: Bargaining Power, Fear of Disagreement and Wage Settlements: Theory and Evidence from U.S. Industry, *Econometrica*, 54 (5):1055-78, 1986.

Bonin, J., D. Jones, and L. Putterman: Theoretical and Empirical Studies of Producer Cooperative: Will Ever the Twin Meet? *Journal of Economic Literature*, 31 (3), 1993.

(iii) Structure of the firm

Hart, Oliver and John Moore (1990): Property Rights and the Nature of the Firm, *Journal of Political Economy*, 98(6), pp. 1119-1158.

Grossman, Sanford and Oliver Hart (1986): The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration, *Journal of Political Economy*, 94(4), pp. 691-719 (supplementary reading to Hart and Moore 1990)

Alchian, Armen A. and Harold Demsetz (1972): Production, Information Costs and Economic Organization. *American Economic Review*, 62(5), pp. 777-795

Furubotn, Eirik G. and Svetozar Pejovich (1972) Property Rights and Economic Theory: A Survey of Recent Literature. *Journal of Economic Literature*, pp. 1137-1162.

Weitzman, Martin L. (1974): Prices versus Quantities. *Review of Economic Studies*, vol. 4, 477 - 491

Bonin, John (1976): On the design of Managerial Incentive Structures in a Decentralized Environment. *AER*, 66(4), pp. 682-687.

Kornai, Janos (1979): Resource Constrained versus Demand Constrained Systems. *Econometrica*

Weitzman, Martin L. (1980): The Ratchet Principle and Performance Incentives, *Bell Journal of Economics*, 11(1), pp 302

Keren, Michael, Jeffrey Miller and James R. Thornton (1983): The Ratchet: A Dynamic Managerial Incentive Model of the Soviet Enterprise. *Journal of Comparative Economics*, 7(4)

Tirole, Jean (1988): *The Theory of Industrial Organization*. MIT Press

(iv) Preprivatization Behavior, Privatization and Restructuring

Li, David D. and Francesca Cornelli (1995): Enterprise Behavior Before Restructuring, unpublished manuscript
Cornelli, F. and D. Li: Optimal Privatization with Large Shareholders, working paper, University of Michigan, 1993.

Aghion, Philippe, Olivier Blanchard and John Burgess (1994): The Behaviour of State Firms in Eastern Europe Pre-Privatization. *European Economic Review*, 1327-1349

Lizal, Lubomir, Miroslav Singer and Jan Svejnar (1995): Manager Interests, Breakups and Performance of State Enterprises in Transition. In: Svejnar, Jan (ed.): *The Czech Republic and Economic Transition in Eastern Europe*. Academic Press

Lizal, Lubomir, Miroslav Singer and Jan Svejnar, Enterprise Break-ups and Performance in Transition, in the *Review of Economics and Statistics*, February 2001.

Kotrba, Josef (1996): Privatization and Restructuring: Friends or Enemies, CERGE-EI WP #103.

Pinto, Brian, Marek Belka and Stefan Krajewski (1993): Transforming State Enterprises in Poland: Evidence on Adjustment by Manufacturing Firms. *Brooking Papers on Economic Activity*

Estrin, Saul and Paul Hare (1992): Firms in Transition: Modelling Enterprise Adjustment. CEPR Working Paper No. 89

Carlin, Wendy, John van Reenen and Toby Wolfe (1994): Enterprise Restructuring in the Transition: an Analytical Survey of the Case Study Evidence from Central and Eastern Europe. EBRD Working Paper No. 14

Barberis, N., M. Boycko, A. Shleifer, and N. Tsukanova: How Does Privatization Work? Evidence from the Russian Shops, *Journal of Political Economy*, 1996.

Frydman, R., C. Gray, M. Hessel, and A. Rapaczynski: When Does Privatization Work? The Impact of Private Ownership on Corporate Performance in the Transition Economies, *Quarterly Journal of Economics*, CXIV(4), 1153-1192, 1999.

Gupta, N., J. Ham and J. Svejnar: Priorities and Sequencing in Privatization: Theory and Evidence from the Czech Republic, *The William Davidson Institute Working Paper No. 323*, 2000.

Djankov, Simeon and Peter Murrell, *Enterprise Restructuring in Transition: A Quantitative Survey*, Mimeo, November 2000.

Laffont, J.J. and J. Tirole: Privatization and Incentives, *Journal of Law, Economics, and Organization*, 7, 84--105, 1991.

Shleifer, A. and R. Vishny: Politicians and Firms, *Quarterly Journal of Economics*, 439, 1994.

Schmidt, K. and M. Schnitzer: Privatization and Management Incentives in Transition Period in Eastern Europe, *Journal of Comparative Economics*, 17, 1993.

Blanchard, O. and P. Aghion: On Insider Privatization, mimeo, 1995.

(iv) Privatization: Practical Issues

Boycko, Maxim, Andrei Shleifer and Robert Vishny (1994): Voucher Privatization. *Journal of Financial Economics*, 35(2), pp. 249-266.

Boycko, M., A. Shleifer and R. Vishny: Privatizing Russia, *Brookings Papers on Economic Activity*, winter, 1993.

Winiecki, Jan (1994): Polish Mass Privatization Programme: The Unloved Child in a Suspected Family. *Adam Smith Research Centre Working Paper*

Kotrba, Josef and Jan Svejnar (1994): Rapid and Multifaceted Privatization: The Case of Czech and Slovak Republics. *Mocst-Most 4*: 147-185

Svejnar, Jan and Miroslav Singer (1994): Using Vouchers to Privatize and Economy: The Czech and Slovak Case. *Economics of Transition 2*, 43-64

Carlin, Wendy and Colin Mayer (1995): Structure of Ownership of East German Enterprises. *CERGE Discussion Paper No. 51*

Stiglitz, J.E.: Theoretical Aspects of the Privatization: Applications to Eastern Europe, Working Paper, Institute for Policy Reform, Stanford University, 1991.

(v) Side Effects of Privatization; Privatization and Public Sector

Witzum, Amos: Privatization, distribution and economic efficiency in transition

Laffont, Jean-Jacques and Jean Tirole (1991): Privatization and Incentives. *Journal of Law, Economics and Organization 7*, 84-105

Turnovec Frantisek (1999): Privatization, ownership structure and transparency: How to measure the involvement of the state, *European Journal of Political Economy*, vol. 15, pp 605-618.

Kočenda, E. (1999): Residual State Property in the Czech republic. *Eastern European Economics*, 37, 1999, 5, 6-35.

(vi) Entrepreneurs and New Firms

Johnson, Simon, John McMillan and Christopher Woodruff, *Entrepreneurs and the ordering of institutional reform*, *Economics of Transition*, 8 (1), 1-36, 2000.

Bratkowski, Andrzej, Irena Grosfeld and Jacek Rostowski, *Investment and finance in de novo private firms*, *Economics of Transition*, 8 (1), 101-116, 2000.

Pissarides, Francesca, Miroslav Singer and Jan Svejnar, *Objectives and Constraints of Entrepreneurs: Evidence from Small and Medium Size Enterprises in Russia and Bulgaria*, *The William Davidson Working Paper No. 346*, October 2000.

(vii) Firms and the Banking Sector

Dittus, Peter (1994): Bank Reform and Behavior in Central Europe. *JCE* 19,335-361

van Wijnbergen, Sweder (1994): On the Role of Banks in Enterprise Restructuring: The Polish Example

Bonin, John (1995): Banking in the Transition: Privatizing banks in Hungary, Poland, and the Czech Republic.

Varhegyi, Eva (1993): Key elements of the Reform of the Hungarian Banking System: Privatization and Portfolio Cleaning

Grosfeld, Irena (1994): Financial Systems in Transition: Is there a Case for a Bank Based System? *CEPR Working Paper No. 1062*

Tirole, Jean (1995): Western Prudential Regulation: Assessment and Reflections on its Application to Central and Eastern Europe. *Economics of Transition*

(viii) Principal Agent Problems in (Post) Transformation Economies

Li, David D. and Francesca Cornelli (1994): Large Shareholders, Private Benefits and Optimal Schemes for Privatization. CEPR Working Paper No. 891

Admati, Anat R., Paul Pfleiderer and Josef Zechner (1994): Large Shareholder Activism, Risk Sharing and Financial Market Equilibrium. JPE 102, 1097-1130

Stark, David and Laszlo Bruszt (1995): Network Properties of Assets and Liabilities: Patterns of Inter-Enterprise Ownership in the Post-socialist Transformation

Stark, David (1994): Recombinant Property in East European Capitalism

Abel, Istvan and Konstantine Gatsios (1993): The Economics of Bankruptcy and the Transition to a market economy

Legros, Patrik and Janet Mitchell (1995): Bankruptcy as a Control Device in Economies in Transition, Journal of Comparative Economics, pp. 265-301.

Investment Behavior and Soft Budget Constraints

Lizal L. and J. Švejnar: Investment, Credit Rationing and the Soft Budget Constraint: Evidence from Czech Panel Data, Review of Economics and Statistics, forthcoming, 2002. Available as: Investment, Credit Rationing, and the Soft Budget Constraint: Evidence from Czech Panel Data, The William Davidson Institute Working Paper of WDI 363, 2000.

Lizal L. and J. Svejnar: "Financial Conditions and Investment during the Transition: Evidence from Czech Firms," in Anna Meyendorff and Anjan Thakor, editors: Designing Financial Systems in Transition Economies: Strategies for Reform in Central and Eastern Europe, MIT Press, 2002, forthcoming (spring of 2002). Available as Working Paper of CERGE-EI 153, March 2000, The William Davidson Institute Working Paper 399, 2001.

Lizal L.: Does a Soft Macroeconomic Environment Induce Restructuring on the Microeconomic Level during the Transition Period? Evidence from Investment Behavior of Czech Enterprises, Working Paper of CERGE-EI 147, June 1999, and Working Paper of WDI 235, June 1999.

Lizal L., M. Singer and A. Baghdasarian: "An Estimation of Euler's Equation of a Profit Maximising Firm: The Case of Czech Republic 1992-1995", in Kari Liuhto, ed.: Ten Years of Economic Transformation, Lappeenranta University of Technology, Lappeenranta, Finland, vol. 2, pp.126-142. Available as CERGE DP 7/98, April 1998.

Anderson, Ronald and Chantal Kegels, Finance and Investment in Transition: Czech Enterprises, 1993-94, The William Davidson Institute Working Paper No. 164, Sept. 1997.

Prasnikar, Janez and Jan Svejnar, Investment and Wages During the Transition: Evidence from Slovene Firms, The William Davidson Institute Working Paper No. 184, July 1998.

Hanousek, Jan and Randall Filer, The relationship between economic factors and equity markets in Central Europe, Economics of Transition, 8 (3), 623-638, 2000.

Frydman, Roman, Cheryl Gray, Marek Hessel, and Andrzej Rapaczynski, The limits of discipline: Ownership and hard budget constraints in the transition economies, Economics of Transition, 8 (3), 577-601, 2000.

Garner, Thesia and Katherine Terrell, Changes in Distribution and Welfare in Transition Economies: Market vs. Policy in the Czech Republic and Slovakia, Economics of Transition, 6(1), 1998.

Leamer, Edward A.: Access to Western markets, and eastern effort levels, Chapter 3 in ..., pp. 503-526.

Monopoly Regulation and Welfare, Corruption

L. Lizal: Monopoly Regulation in the Czech Republic and EU, CERGE-EI DP No. 1999-26, November 1999,

In Czech available as: Lizal L.: Koordinace ekonomické politiky ČR v síťových odvětvích s praxí EU

[Coordination of Czech Economic Policy in Network Industries with the EU], Finance a úvěr, 9/2000, September, pp. 488-502.

Bergman Lars, Doyle Chris, Gual Jordi, Hultkrantz Lars, Neven Damien, Röllner Lars-Hendrik, Waverman Leonard (1998): Europe's Network Industries: Conflicting Priorities, CEPR, London.

Lizal L. and E. Kocenda: State of Corruption in Transition: The Case of the Czech Republic, Emerging Markets Review, vol. 2 (2), 2001, pp. 138-160.

Useful Books for the sequence:

Salvatore Zecchini, 1997, Lessons from the Economic Transition: Central and Eastern Europe in the 1990s. OECD-Kluwer Academic Publishers.

Gerard Roland, Transition and Economics, MIT Press, 2000.

Gregory, Paul and Robert Stuart: Comparative Economic Systems. Fourth Edition, Houghton Mifflin Company, Boston, 1992.

Kornai, Janos: The Socialist System: A Political Economy Approach. Princeton University Press, 1992.

Kornai, J.: The Economics of Shortage. North-Holland, 1980.

Bornstein, Morris: Comparative Economic Systems: Models and Cases. 7th Ed., Irwin, Boston. 1994.
 Heal, Geoffrey M., The Theory of Economic Planning, Noth Holland.
 Olivier Blanchard, The Economics of Post-Communist Transition.
 Marie Lavigne, The Economics of Transition, NY, London, 1995.
 Daniel Gros and Alfred Steinherr, Winds of Change, NY, London, 1995

Note:

The reading list can be updated during the semester in order to accommodate the needs of the course and/or to reflect recent developments in the literature on transition.

FINANCIAL MARKETS I

	<i>Lecturer</i>	<i>Teaching Assistant</i>
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Office hours	M 10-12, W 13-15	

Course description

This is devoted to a thorough introduction to major areas of asset pricing at the doctoral level. While there are no specific prerequisites, the course is intense in its use of financial mathematics, basic of which will be covered as well.

Required texts

Penati, A. and G. Pennacchi, *Notes on Asset Pricing*, will be made available in electronic form.
 Ingersoll, J., 1987, *Theory of Financial Decision Making*, Rowman&Littlefield, Totowa, NJ.
 Cochrane, J., 2001, *Asset Pricing*, Princeton University Press.

Recommended texts

Duffie, D., 2001, *Dynamic Asset Pricing Theory*, Princeton University Press.
 Huang, C. and R. Litzenberger, 1988, *Foundations for Financial Economics*, Elsevier Science Publishers (North-Holland), New York.
 LeRoy, Stephen F. and Jan Werner, 2001, *Principles of Financial Economics*, Cambridge University Press, Cambridge, UK.
 Merton, R.C., 1993, *Continuous-Time Finance*, Blackwell Publishers, Cambridge, MA.
 Hull, J.C., 2002, *Options, Futures, and Other Derivatives*, Prentice Hall, Upper Saddle River, NJ.
 Campbell, J., A. Lo, and C. MacKinlay, 1997, *The Econometrics of Financial Markets*, Princeton University Press, Princeton, NJ.

A list with a number of articles will be distributed in class.

Course outline

Choice Under Uncertainty
 Risk Aversion and Risk Premia
 Risk Aversion and Portfolio
 Mean Variance Analysis
 An Application of Mean Variance Analysis: Cross-Hedging
 The Capital Asset Pricing Model
 Arbitrage Pricing Theory
 Consumption - Savings, Portfolio Choice, and Asset Pricing
 Option Pricing
 The Cox-Ross-Rubinstein Option Pricing
 Option Pricing Using the Binomial Model
 The Essentials of Diffusion Processes and Ito's Lemma
 Option Pricing in Continuous-Time and the Black-Scholes Equation
 An Equilibrium Model of the Term Structure of Interest Rates
 The Risk-Neutral Valuation Method
 Options on an Asset that Yields Continuous Dividends
 Arbitrage, Equivalent Martingale Measures, Risk-Neutral Valuation, and Pricing Kernels

Arbitrage-Free Binomial Models of the Term
 Extending Diffusion Processes to Allow for Jumps
 Modeling Credit Risk
 Intertemporal Consumption and Portfolio Choice: The Dynamic Programming Approach
 Further Implications of the Basic Model of Intertemporal Consumption and Portfolio Choice
 Rational Speculative Asset Price Bubbles
 Intertemporal Consumption and Portfolio Choice in Continuous-Time
 An Intertemporal Capital Asset Pricing
 Non-Time-Separable Utility: Habit Formation
 Recursive Utility
 Prospect Theory and Asset Prices
 On the Efficiency of Competitive Stock Markets Where Trades Have Diverse Information
 Market Micro-Structure: Notes on the Kyle Model

Requirements and Grading

There will be four homework assignments each worth 10% of the grade (40% in total), a midterm exam worth 30%, and a non-cumulative final exam worth 30%. A part of the fourth homework assignment will include an introduction to a paper on a topic approved by the instructor.

INDUSTRIAL ORGANIZATION I

	<i>Lecturer</i>	<i>Co-lecturer</i>	<i>Teaching Assistant</i>
Name	Avner Shaked	Kresimir Zigic	Michael Kúnin
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Office hours	Please see http://www.cerge.cuni.cz/consult/	By appointment	

Course Information

Industrial organization is about strategic interactions of firms within an industry. As such it inspired the study of game theory and in turn was helped by its development. Industrial organization was an unfailing source of interesting situations of interactions that game theory modeled and analyzed. The course will follow the books of J. Tirole and O. Shy.

Course Outline

- The main topics covered by the course will be:
- 1.) Models of Bertrand and Cournot Competition
 - 2.) Vertical and Horizontal product differentiation
 - 3.) Models of Advertising
 - 4.) Barriers to Entry and Exit
 - 5.) Economics of Information and Innovation, Research and Development

Requirements and Grading

Final exam 100%

Reading

a) Textbooks:

- 1.) Tirole, Jean: "The Theory of Industrial Organization.", MIT press, 1989
- 2.) Shy, Oz: "Industrial Organization, Theory and Applications.", MIT Press, 1996
- 3.) Handbook of Industrial Organization, Vol I and II, eds. R. Schmalensee and R. Willig, Amsterdam: North-Holland. 1989.

b) Articles:

- D'Aspremont C., J. J.Gabszewicz and J.-F. Thisse: "On Hotelling Stability in Competition", *Econometrica*, 1979.
 Butters, G.R.,: "Equilibrium Distribution of Sales and Advertising Prices", *Review of Economic Studies*, 1977.
 Dasgupta, P. and J. Stiglitz. 1980. "Industrial Structure and The Nature of Innovative Activity." *Economic Journal* 90: 266–93.
 Dixit, A.: "A Model of Duopoly Suggesting a Theory of Entry Barriers", *Bell Journal of Economics*, 1979.
 Dixit, A. : "The role of Investment in Entry Deterrence", *Economic Journal*, 1980.

Eaton, B.C. and R.G. Lipsey: "Exit Barriers and Entry Barriers, The Durability of Capital as Barrier to Entry", *Bell Journal of Economics*, 1980.

Spence, A.M."Entry, Capacity, Investment and Oligopolistic Pricing", *Bell Journal of Economics*, 1977.

Fudneberg, D. and J. Tirole: "The Fat-Cat, The Puppy Dog Ploy, and Lean and Hungry Look.", *American Economic Association Papers and Proceedings*, May 1984.

Green, E. J and R.H.,Porter: "Non Cooperative Collusion Under Imperfect Price Information", *Econometrica*, 1984.

Gilbert,R.J.: "Mobility Barriers and the Value of Incumbency," In R. Schmalensee and R. Willig, eds. *Handbook of Industrial Organization*, pp. 476–531. Amsterdam: North-Holland. 1989.

Grossman, M. G. and C., Shapiro: "Informative Advertising with Differentiated Products", *Review of Economic Studies*, 1984.

Kamien, I. M., E. Muller and Zang : "Research joint venture and R&D cartels." *American Economic Review* 82, 1992.

Kreps., D. and J. Scheinkman: "Quantity Precommitment and Bertrand Competition Yield Cournot Outcomes", *Bell Journal of Economics*, 1983.

Lee, T. and L. Wilde: "Market Structure and Innovation: A Reformulation." *Quarterly Journal of Economics* 194: 429-436, 1980.

Loury, G.C: "Market Structure and Innovation ." *Quarterly Journal of Economics* 93: 395- 410, 1979.

Maggi, G.: "Strategic Trade Policies with Endogenous Mode of Competition", *American Economic Review*, March 1996.

Salop, S.C.: " Monopolistic Competition with Outside Goods", *Bell Journal of Economics*, 1979.

Shaked, A. and J., Sutton: "Relaxing Price Competition through Product Differentiation," *Review of Economic Studies*, 1982.

Shaked and Sutton: "Natural Oligopolies", *Econometrica*, Vol. 51, pp. 1469-1483, 1982

Shapiro, C.: "Theories of oligopoly behaviour." In R. Schmalensee and R. Willig, eds. *Handbook of Industrial Organization*, pp. 329–410. Amsterdam: North-Holland. 1989

Suzumura, K.: "Cooperative and noncooperative R&D in an oligopoly with spillovers." *American Economic Review* 82: 1992

Wolinsky, A : "Prices as Signals of Product Quality," *Review of Economic Studies*, 1983

Wolinsky, A.: "True Monopolistic Competition as a Result of Imperfect Information ", *Quarterly Journal of Economics*, 1986

MONEY AND CREDIT I

	<i>Lecturer</i>	<i>Teaching Assistant</i>
Name	Radim Boháček	tba
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Office hours	Mon and Thu At 2:30-4:30 p.m.	

Course information

This course is the first part of the Money and Credit sequence. In the first year you learnt how to understand the basic theory and how to read papers. The goal of this course is to learn how to write papers in macroeconomic theory addressing important issues in real economies. We will study in great detail the essential theoretical topics and tools of modern macroeconomics and apply them to models and numerical simulation in MATLAB. We will study optimal contracts in asymmetric information models, first in partial and then in general equilibrium. Understanding contracts is the first step to analyze credit markets and their functioning outside the Arrow-Debreu world. Then we will focus on real effects of monetary policy in economies with frictions related to information, limited commitment and limited participation. Finally, we will analyze equilibrium search models and institutions in politico-economic equilibria.

Course outline

- I. Asymmetric Information and Optimal Contracts
- II. Contracts in general equilibrium with heterogenous agents
- III. Credit markets and frictions
- IV. Real effects of monetary policy
- V. Equilibrium search
- VI. Politico-economic equilibrium

Requirements and grading

Problem sets	30%
Midterm	30%
Final	40%

The policies related to student conduct will be strictly enforced.

Readings

Main Textbook:

Stokey, Nancy L., Robert E. Lucas, Jr., and Edward C. Prescott. *Recursive Methods in Economic Dynamics*. Cambridge: Harvard University Press, 1989.

Other Textbooks:

Ljungquist, Lars, and Thomas J. Sargent. *Recursive Macroeconomic Theory*. MIT Press, 2000.

Sargent, Thomas J. *Dynamic Macroeconomic Theory*. Cambridge: Harvard University Press, 1987.

Sargent, Thomas J. *The Conquest of American Inflation*. Princeton University Press, 1999.

Cooley, Thomas F., Editor. *Frontiers of Business Cycle Research*. Princeton University Press, 1995.

Mas-Collel, Andreu, Michael D. Whinston, and Jerry R. Green. *Microeconomic Theory*. Oxford University Press: New York,

PUBLIC ECONOMICS

	<i>Lecturer</i>	<i>Teaching Assistant</i>
Name	Andrew Austin	tba
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Office hours	By appointment	

Course information

Public economics seeks to understand how governments, or other collections of agents, behave and suggest how an optimal government would behave. In an Arrow-Debreu world governments are not necessary, and cannot enhance economic efficiency. However, real world markets may fail to deliver economic efficiency (market failure) or provide grossly unequal rewards for citizens, opening the possibility that governments can improve efficiency or provide a "fairer" distribution of resources. The first part of the course analyzes violations of the conditions of the First Welfare theorem such as externalities, public goods, non-convexities and imperfect information, and provides a normative basis for government action. The second part of the course concentrates on positive models of government behavior, otherwise known as political economy or public choice. Collective action requires collective choice, and the course will cover basic results of group decision-making such as Arrow's Impossibility Theorem, the Gibbard-Satterthwaite theorem and voting theory. Finally, the course offers a brief introduction to the theory of taxation.

Requirements and grading

I will assign several homework assignments and there will be a midterm and final. Grades will be calculated using the following weights:

Homework	15%
Class Participation and Presentation	10%
Midterm	35%
Final	40%

I expect students to attend all classes, do the readings before class and to check email regularly. I will assume that students with several absences wish to be dropped from the course. Students are encouraged to form study groups for homework and review. Past experience and educational research indicate that students who join study groups significantly outperform students who do not. Study groups **may not exceed three** members.

Membership of study groups must be acknowledged on homework assignments.

No mobile phones, pagers or other electronic devices allowed in the classroom except for pre-approved emergency situations.

I expect academic integrity from all students on all assignments and examinations. Academic honesty is fundamental to scholarship. Violations of academic honesty will be treated harshly. No first warnings will be given. If you have questions about what is acceptable, ask first.

Course outline

Starred (*) readings are required. Some of the articles will be available on the Internet via **JSTOR** in Adobe Acrobat format. **JSTOR** is a collection of scholarly journals available in electronic form. The library has **one** terminal with JSTOR access. Printing with JSTOR can be slow, so be sure to plan ahead. Follow the link to download a free copy of the **Adobe Acrobat Reader**.

I. Introduction: Review of Fundamental Welfare Theorems

*Introduction (FPE).

*Basu, Kaushik (1991): "Markets, Power and Social Norms" in **Economic Graffiti: Essays for Everyone**. Bombay: Oxford.

Kreps, ACIMT. Chapters 5.1, 5.2, 5.4, 6.3

*Martin Paldam, Martin and Gert T. Svendsen (2000). "An essay on social capital: looking for the fire behind the smoke." **European Journal of Political Economy** 16(2), 339-366.

Riker, William and David L. Weimer, "The Political Economy of Transformation: Liberalization and Property Rights." In Jeffrey S. Banks and Eric A. Hanushek, eds. **Modern Political Economy**. Cambridge: Cambridge University Press, 1995, 80-107.

II. Theory of Market Failure

A. Externalities

*Ch. 1, FPE.

*Arrow, K. (1970): "The Organization of Economic Activity: Issues Pertinent to the Choice of Market Versus Non-Market Allocation" in **Public Expenditure and Policy Analysis**, R.H. Haveman and J. Margolis (eds.). Chicago: University of Chicago Press.

Buchanan, J. and W.C. Stubblebine (1962): "Externality." **Economica**, 371- 384.

*Starrett, D. (1972): "Fundamental Non-convexities in the Theory of Externalities." **Journal of Economic Theory** 4, 180-199.

B. Public Goods

1. Basic Theory

*FPE Ch. 2, LOPE Ch. 16.

*Samuelson, Paul A. (1955): "A Diagrammatic Exposition of the Theory of Public Expenditures." **Review of Economics and Statistics** (Nov.).

*Samuelson, Paul A. (1954): "The Pure Theory of Public Expenditure." **Review of Economics and Statistics**, 387-389.

2. Lindahl Pricing

*Lindahl, E. (1919): "Positive Lösung, Die Gerechtigkeit der Besteuerung", translated as "Just Taxation - A Positive Solution" in **Classics in the Theory of Public Finance**, R.A. Musgrave and A. T. Peacock (eds.), London: Macmillan.

3. Applications and Implications of the Prisoners' Dilemma and Public Goods Theory

*AP, Chapters 9, 10.

*Russell Hardin (1982): **Collective Action**, Baltimore: Johns Hopkins. Chapters 1 and 2

Mancur Olson, **The Logic of Collective Action**. Chapters 1 and 2

*GTPT, Chapter 5.

4. Application and Extension of Public Goods Theory

*Berry, Steven T. and Joel Waldfogel (1999): "Public Radio in the U.S.: Does it Correct Market Failure of Cannibalize Commercial Stations?." **Journal of Public Economics** 71, 189-211.

*Marx, Leslie and Steven Matthews (2000): "Dynamic Contributions to a Public Project." **Review of Economic Studies** 67(2), 327-58.

C. Choice via Feet and Hands: Voting and Local Public Goods

i. Classics

*Harold Bowen (1943): "The Interpretation of Voting in the Allocation of Economics Resources." **Quarterly Journal of Economics** 58, 27-49.

*Charles Tiebout (1956): "A Pure Theory of Local Expenditures." **Journal of Political Economy** 64, 416-424.

*Bewley, Truman (1981): "A Critique of Tiebout's Theory of Local Public Expenditure." **Econometrica** 49, 713-740.

ii. Recent Directions

*Conley, John and Hideo Konishi (2000):

"Migration-Proof Tiebout Equilibrium: Existence and Asymptotic Efficiency ." working paper

*Epple, Dennis and Thomas Romer (1991): "Mobility and Redistribution." **Journal of Political Economy** 99:(4), 828-858

*Thomas Nechyba (2000): "Mobility, Targeting, and Private-School Vouchers." **American Economic Review** 90(1), 130-46.

D. Nonconvexities

1. Theory

*FPE chapter 3.

2. Rent-seeking and regulated monopolies

*"The phone flushaway," **The New Republic**, Oct 9, 1989 v201 n15 p13+.

PF Chapter 9, pp.188-191.

III. Social choice and Collective Decisionmaking

A. Arrow's Impossibility Theorem

*FPE, Chapter 4

*Sen, Amartya (1979): "Personal Utilities and Public Judgements: Or What's Wrong with Welfare Economics?" **Economic Journal** 89 (Sept), 537-558.

*Saari, Donald (1998): "Connecting and Resolving Sen's and Arrow's Theorems."

Social Choice & Welfare 15, 239-261

Inman, Robert (1985): "The 'New' Political Economy" in **HOPE**

Spear, Stephen **Notes on Arrow's Impossibility Theorem** Another proof strategy.

GTPT, Chapter 2 section 1.

Arrow, Kenneth (1963): **Social Choice and Individual Values** (second edition).
New Haven: Yale University Press.

AP, Chapter 4 - good nontechnical discussion of assumptions used in Arrow's Theorem.

B. Normative Models and Equity

Sen, Amartya (1985): "Social Choice and Justice: A Review Article." **Journal of Economic Literature** 23, 1764-1776.

Rawls, John (1971): **A Theory of Justice**. Cambridge: Harvard University Press.

Baumol, William (1986): **Superfairness: Application and Theory**. Cambridge: MIT Press.

Sudgen, Robert (1986): **The Economics of Rights, Co-operation, and Welfare**. Oxford:
Oxford University Press.

C. Spatial voting models

*William Riker, **Art of Political Manipulation**. New Haven: Yale University Press.
chapter on the Flying Club

***GTPT**, Chapter 6.

AP, Chapter 5.

Robert Inman and Dan Ingberman (1987), "The Political Economy of Fiscal Policy" in P.G.
Hare (ed.) **Public Economics: A Reader**. Oxford: Basil Blackwell

D. Mechanism Design, Agenda Setting and Information

*FPE, chapter 5.

Schmeidler, D. and H. Sonnenschein, "Two Proofs of the Gibbard-Satterthwaite Theorem on the Possibility of a Strategy-proof Social Choice Function." In H.W. Gottinger and W. Leinfeller (eds.) **Decision Theory and Social Ethics, Issues in Social Choice** Germany: Reidel

AP, Chapter 6.

*Riker, William **Art of Political Manipulation**. Chapters on Pliny the Younger,
How to Win a Roll Call by Not Voting, Exploiting the Powell Amendment.

* Thomas Romer and Robert Rosenthal (1979), "Bureaucrats vs. Voters." **Quarterly Journal of Economics** 93, 563-87.

GTPT, pp.266-284. **E. Thinking about Markets and Politics**

*Wittman, Donald (1989): "Why Democracies Produce Efficient Results." **Journal of Political Economy** 97(6).

*Sen, Amartya (1999): "On the Possibility of Social Choice." **American Economic Review** 89(3), 349-78.

F. Federalism

*Oates, Wallace (1972): **Fiscal Federalism**. College Park, Maryland: University of Maryland Press.

*Wildasin, David (1991): "Common Labor Market and Asylum Policy." **American Economic Review** 81: (4) 757-774.

Inman, Robert(1997) "Rethinking Federalism." **Journal of Economic Perspectives** 11(4), 43-64.

Wildasin, David (1997): Fiscal Aspects of Evolving Federations: Issues for Policy and Research

, in D.E. Wildasin (ed.), **Fiscal Aspects of Evolving Federations**. Cambridge: CUP

VI. Rudiments of Tax Theory

A) Excess Burden

- *Auerbach, Alan (1985): "The Theory of Excess Burden and Optimal Taxation" in **HOPE**.
- *Hausman, Jerry (1981): "Exact Consumer's Surplus and Deadweight Loss." **American Economic Review** 71, 662-676.
- *Haveman, Robert, M. Gabay and Jim Andreoni (1987): "Exact Consumer's Surplus and Deadweight Loss." **American Economic Review** 77, 494-495.
- *Willig, Robert ((1976): Consumer's Surplus Without Apology." **American Economic Review** 66, 589-597.
- *FPE, chapter 6.

B) Introduction to Optimal Taxation

- *LOPE, lecture 11.
- *Auerbach, Alan and James R. Hines Jr. (2000): "Taxation and Economic Efficiency ." **HOPE** vol.3.
- *Stern, Nicholas (1987): "The Theory of Optimal Commodity and Income Taxation: An Introduction" In David Newbery and Nicholas Stern (eds.), **The Theory of Taxation in Developing Countries**. Oxford: Oxford University Press.

C) Commodity Taxes (Indirect Taxation)

- *LOPE, lectures 11 and 12.
- *Diamond, Peter A. and James Mirlees (1971): "Optimal Taxation and Public Production, I: Production Efficiency and II: Tax Rules." **American Economic Review** 61, 8-27 and 261-276.
- *Atkinson, Anthony and Nicholas Stern (1974): "Pigou, Taxation, and Public Goods." **Review of Economic Studies** 41, 119-127.

D) Income Taxes (Direct Taxation)

- *LOPE, lectures 2 and 13.
- *Stiglitz, Joseph E. (1987): "Pareto Efficient and Optimal Taxation and the 'New' New Welfare Economics." In **HOPE** vol. 2.

Readings

There will be several books used in this course, which are or will be available in the CERGE-EI Library. Abbreviations for commonly referenced books follow in parentheses.

Chief References:

- Jha, Raghbendra (1998): **Modern Public Economics**, London: Routledge.
- Laffont, Jean-Jacques (1989): **Fundamentals of Public Economics**, Boston: MIT.
- Myles, Gareth (1999): **Public Economics**, Cambridge: Cambridge University Press.

Recommended References:

- Auerbach, Alan (1999): **Public Finance**. New York: Worth.
- Atkinson, Anthony and Joseph Stiglitz (1980): **Lectures on Public Economics**. London: McGraw-Hill. (**LOPE**)
- Handbook of Public Economics** (volumes 1 and 2) (1985), volume 3 (2002) A. Auerbach and M. Feldstein, (eds.). Amsterdam: North Holland. (**HOPE**)
- Banks, Jeff and David Austen-Smith (1998): **Positive Political Theory I: Collective Preference**. Ann Arbor, Michigan: Univ. of Michigan Press
- Kreps, David (1990): **A Course in Microeconomic Theory**, Princeton: Princeton University Press. (**ACIMT**)
- Merrill, Samuel and Bernard Grofman (1999): **A Unified Theory of Voting**, Cambridge: Cambridge Univ. Press
- Mueller, Dennis (1989): **Public Choice II**, Cambridge: Cambridge University Press. (**PCII**)
- Mueller, Dennis (2003): **Public Choice III**, Cambridge: Cambridge University Press. (**PCIII**)
- Ordeshook, Peter (1986): **Game Theory and Political Theory**. Cambridge: Cambridge University Press. (**GTPT**)
- Schofield, Norman (2002): **Mathematical Methods in Economics**. New York University Press: New York
- Starrett, David (1988): **Foundations of Public Economics**. Cambridge: Cambridge Univ. Press.

Classics and Other Useful Books:

- Buchanan, James and Gordon Tullock (1965): **The Calculus of Consent**. Ann Arbor, Michigan: Ann Arbor Paperbacks. Online at <<http://www.econlib.org/library/Buchanan/buchCv3Contents.html>>
- Downs, Anthony: (1957): **An Economic Theory of Democracy**. New York: Harper Row.
- Jerry Kelly (198?): **Social Choice Theory**. (rigorous mathematical coverage of social choice)
- Olson, Mancur (1965): **The Logic of Collective Action**. Cambridge, MA: Harvard.
- Sen, Amartya K.(1970): **Collective Choice and Social Welfare**. San Francisco: Holden-Day.

Tufte, Edward R (1978): **Political Control of the Economy**. Princeton, NJ: Princeton.
 Wittman, Donald (1995): **The Myth of Democratic Failure**. Chicago: Univ. of Chicago Press.

Undergraduate level:

These books will be useful to understand basic concepts and institutions. Understanding institutional structures and how they affect economic and political behavior is a central part of public economics.

Cullis, John and Philip Jones (1992), **Public Finance and Public Choice**, McGraw-Hill.

Slightly more theoretical than Holcombe, but no advanced math is used.

Feldman, Allan (1980), **Welfare Economics and Social Choice Theory**, Boston: Kluwer Nijhoff.

Careful proofs and diagrams, no calculus.

Holcombe, Randall (1996) **Public Finance**, St. Paul: West. (PF)

Standard undergraduate public finance text with good introduction to public choice available in PDF and Word formats.

McLean, Iain (1987), **Public Choice: An Introduction**, Oxford: Basil Blackwell.

Good intro to the subject with UK examples.

Riker, William (1986), **The Art of Political Manipulation**, New Haven, CT: Yale University Press. (TAPM)

Riker, William (1982): **Liberalism against Populism**, Freeman.

Riker was a central figure in the development of the public choice field, known for his ability to use rational models to understand politics and history. These books use historical examples to illustrate public choice ideas and provide a great introduction to the field. Very interesting reading.

Rosen, Harvey (1999) **Public Finance**. Homewood, IL: Irwin (any edition)

Another standard public finance text. Better on taxation than Holcombe, worse on public choice.

Shepsle, Kenneth and Mark Bonchuck (1997), **Analyzing Politics: Rationality, Behavior and Institutions**, New York: Norton. (AP)

Text based on leading public choice researcher's Harvard undergraduate public choice course. Good discussion of key issues. Not much math at all.

Writing Resources:

Communicating your ideas to colleagues in well-written English is a crucial skill. To persuade others that your ideas are interesting requires clarity in thought and words. Also, providing references to the work and ideas of others is essential.

ADVANCED ENGLISH COMBINED SKILLS

	<i>Lecturer</i>		
Name	L. Smith	S. Peck	L. Mentz
Office	308	44	317
Phone	240 05 242	240 05 197	240 05 254
e-mail			
Office hours	posted on door	posted on door	posted on door

Course information

The purpose of this class is to prepare students for the written and oral presentations they will be expected to produce as Ph.D. candidates and as economists. The course will focus on developing and refining oral fluency and presentation skills, improving professional writing skills, expanding scholarly economics vocabulary, and increasing overall proficiency in English.

Requirements and Grading

Students are evaluated according to their mastery of oral and written communication skills as well as performance on course assignments. These assignments may include the following:

- Oral presentations
- Professional writing tasks
- Research grant proposal

III. CERGE Faculty Members Teaching in the Fall Semester 2003

Austin Andrew

Ph.D. in Economics from University of Pennsylvania (1991), Diploma in Economics (1986) from University of Cambridge. Executive secretary for Program for Assessing and Revitalizing the Social Sciences (1989-1990), Research Associate in Institute for the Study of Political Economy (1997-2000), Assistant Professor in Department of Economics, University of Houston (1990-1998) and Visiting Assistant Professor in Bowdoin College (1998-present). Member of American Economics Association, Econometrics Society and Southern Economic Association. Research interest: theoretical and empirical analysis of municipal government, analytic models of political economy and game theoretic models of local public finance. Teaching interests: public economics, industrial organization, microeconomics and urban economics.

Radim Boháček

Ph.D. in Economics from University of Chicago (1999), MA in Economics (1996) and MA in Social Sciences and History (1999) from University of Chicago. Research in general equilibrium macroeconomics, dynamic macroeconomic theory, capital theory and models with heterogeneous agents. Lecturer on macroeconomics at University of Chicago (1997-1999). Recipient of the University of Chicago Century Fellowship (1995-1999) and the Irving B. Harris Fellowship (1992-1994). Ph.D. and M.A. from the University of Southern California, and M.Sc. and B.Sc. from the Federal University of Rio de Janeiro. Research activities: researcher at the Industrial Economics Institute (in Rio de Janeiro), Fulbright Scholar at The Johns Hopkins University (Baltimore), research assistant to Richard Easterlin in the Economics Department (USC), consultant to the Government of Brazil, and various short-term assignments with the Office of the Director-General of The World Bank (in Washington, DC). Lecturer at the Department of Economics, California State University, Fullerton. Fellow of the International School of Economic Research (Siena) and of the American Institute for Economic Research (Massachusetts); member of the American, European, Western, Brazilian and Latin American Economic Associations.

Libor Dušek

Ph.D. in Economics from University of Chicago (2003). MA (1998) and BA (1995) in Economics from Charles University, Prague. Currently assistant professor at CERGE-EI. Lecturer on law and economics at University of Chicago (2002) and Charles University (2001), advisor to Minister of the Czech government (1998), research fellow at the Liberalni Institute in Prague (1997-1999), junior researcher at Progress and Freedom Foundation in Washington, DC (1995-96). Research interests: size of government, social security, tax incidence, economics of crime, economics of regulation.

Michal Kejak

Master of Science in Technical Cybernetics, Czech Technical University, Prague, Faculty of Electrical Engineering, Department of Control, June 1982. M.A. in Economics, Central European University, Prague, awarded by the University of the State of New York in August 1993. Ph.D. in Technical Cybernetics, Czech Technical University in Prague, Faculty of Machine Engineering, Department of Automatic Control, October 1993. Diploma, Program in Applied Economics 1993-1994, Institute for Advanced Studies, Vienna, June 1994. Researcher, Institute for Application of Computing Technique in Control, Prague, September 1982-July 1990. Researcher, Institute for Forecasting of the Academy of Sciences of the Czech Republic, Prague, August 1990-March 1993. Visiting Research Fellow, Economics Department, Institute for Advanced Studies, Vienna, May 1993-July 1994. Visiting Scholar, Hoover Institute, Stanford University, September 1995-June 1996. Temporary Consultant, World Bank, 1999. Since 1993 a Researcher at the Economics Institute of the Academy of Sciences of the Czech Republic. Since 1997 an Assistant Professor at CERGE, Charles University, Prague.

Evžen Kočenda

Graduated in 1985 from the Prague School of Economics with Ing. degree in International Trade Management. MA in Economics from the University of Toledo, Ohio in 1992. Graduate studies in Economics at the University of Houston, Texas with Ph.D. degree in 1996. 1996 - 1998 Deputy Director for Research at CERGE and EI. 1996-1999 Assistant Professor. Since 1999 Associate Professor at CERGE, Charles University. Research Fellow of the William Davidson Institute at the University of Michigan Business School and Research Affiliate of

CEPR, London. Economic Advisor to the Minister of Foreign Affairs of the Czech Republic, 1997. Since 1998 member of the editorial board of the journal *Finance a úvěr*. 1998 – 1999 member of the Scientific Council of the Ministry of Transport and Communications. Since 1999 member of the Scientific Council of the Economics Institute.

Peter Latham

Received an MA in Applied Linguistics, with Distinction, from Kings College, University of London, in 2001, and a BSc in Sociology from Kingston University, Surrey, England. He was awarded the RSA Diploma in Teaching English as Foreign Language in 1997. Previous teaching experience includes Kings College, University of London, London Metropolitan University, and Queen Mary College, University of London.

Lubomír Lízal

Graduated from Czech Technical University in Prague, The Faculty of Electrical Engineering in 1992. Received his Master's diploma in Systems Programming and Electronic Computers. Is currently Researcher at the Economics Institute of the Academy of Sciences of the Czech Republic. Defended his Ph.D. thesis at CERGE, Charles University, Prague in 1998. Short-term consultant for the World Bank in 1994. Has held fellowships at the Tinbergen Institute, Amsterdam, in 1992, at the University of Pittsburgh, 1994-1995, and at the William Davidson Institute at the University of Michigan, 1996-1997. Member of the European Economic Association, CEPR, Česká ekonometrická společnost (Czech Econometrics Society) and a William Davidson Institute Research Fellow.

Laura Mentz

Graduated from the Catholic University of America, Washington, D.C., in 1989 with a B.A. in Philosophy (with highest honors) and received an M.A. in Rhetoric and Linguistics from the same university in 1994. She has taught English Composition and ESL courses since 1992 at various colleges in the D.C. area and at George Mason Univ., Fairfax, Virginia, and has been an Instructor in English and ESL at Montgomery College, Rockville, Maryland, June 1997-July 2001. International Student Advisor at Montgomery College, May, 1999-July 2001; Contributing author and editor, *Thinking and Writing* (1998); Teacher/Consultant, Northern Virginia Writing Project.

Daniel Münich

Received a Ing. degree in 1990 in Electrical Engineering, Electric Propulsion and Control from Czech Technical University (Ceske vysoke uceni technicke) in Prague, Faculty of Electrical Engineering. Received a Ph.D. degree in economics in 1998 from the Center for Economic Research and Graduate Education, Charles University (CERGE) in Prague. Currently an assistant professor at CERGE and since summer 1999 Director of Graduate Studies. Researcher at Economic Institute (EI). Research Fellow of the William Davidson Institute at the University of Michigan Business School and Research Affiliate of CEPR, London. 1997-98 visiting scholar at the William Davidson Institute at the University of Michigan. 1993-96 a researcher at EI. 1997-98 advisor to the Minister of Education, Youth and Sport and the Minister of Finance of the Czech Republic. Chief editor of *Svobodne rozhledy* journal. Member of the Czech and European Economic Associations and of European Association of Labour Economists. Research interests in the area of empirical labor market and education. Consultant to the Worldbank, European Commission and Institute for Information in Education (UIV).

Sarah Peck

Sarah Peck received a MA in Anthropology from Temple University, Philadelphia and a BA in Economics from Lafayette College, Easton, Pennsylvania. Previous teaching experience includes Fakulta Ekonomicka, Zapadoceska Univerzita in Cheb; Anglo-American College in Prague; Akiba Hebrew Academy and the Nationalities Service Center in Philadelphia, Pennsylvania.

Avner Shaked

Graduated with special distinction from Hebrew University, Jerusalem, B.Sc. 1964, M.Sc. 1965, Ph.D. in Economics, 1972. 1968 Assistant Lecturer, Maths Dept. H.U., Jerusalem. 1969-1972 Assistant Lecturer, Economics Dept. H.U., Jerusalem. 1972-1974 Research fellow, Nuffield college, Oxford. 1974-1976 Lecturer,

Economics Dept. H.U., Jerusalem. 1976-1977 Lecturer, Economics Dept, Birmingham University, U.K. 1977-1983 Lecturer, Economics Dept. London School of Economics, U.K. 1983-1989 Reader In Economics, L.S.E., U.K. 1989-present Professor of Economic Theory, Bonn University, Germany and CERGE-EI in Prague.

Sergey Slobodyan

Received B.Sc. in Physics from Novosibirsk State University, Russia, in 1988. Worked in Institute of Inorganic Chemistry - experimental low-temperature physics, statistical data analysis. In 1995 received M.A. (Economics) and in 2000 Ph.D. (Economics) from the Washington University in St. Louis, USA. Research interests: models of economic growth and development, nonlinear economic models, dynamical systems theory.

Richard Stock

Received a M. A. in Literature and Theory, concentrating in Later American Literature and Writing Studies, from the University of Illinois at Urbana-Champaign in 1998, and a B. A. in the Teaching of English, with a minor in Social Science, from the University of Illinois at Urbana-Champaign in 1996. He is a certified secondary school teacher in Illinois, USA, and has taught at Rolling Meadows High School in Illinois and the University of Illinois at Urbana-Champaign. In Prague he has taught at the Anglo-American College, the Czech Technical University in Prague and the U.S. Air Force Defense Language Institute. Currently he is studying to receive an M.A. (expected in 2004) in the Teaching of English as a Foreign Language from the University of Reading.

Lawrence Smith

Received a MA in Teaching English as a Foreign Language from the University of Reading, England. Testing advisor, ESP tutor and curriculum coordinator at Bilkent University, Ankara, Turkey (1990-1996); Academic Writing instructor at Moscow State University (1997); Academic English coordinator at the International College of Economics and Finance in Moscow between 1997 and 2000. Before working at CERGE-EI, he was Academic Writing Instructor at Central European University in Budapest.

Petr Zemčik

Graduated with Honors in 1992 from the Prague School of Economics with M.Sc. degree in Econometrics and Operations Research. MA in Economics from the University of Pittsburgh in 1996. Graduate studies in Economics at the University of Pittsburgh with Ph.D. degree in 1997. 1992 - 1998 Teaching Fellow, Dept. of Economics, University of Pittsburgh. August 1998 – Present, Assistant Professor, Dept. of Economics, Southern Illinois University, Carbondale.

Kresimir Zigic

Graduated from the Faculty of Economics, University of Zagreb, B.A. 1982, M.A., 1988. Financial Officer, Rade Koncar Corporation, Zagreb, 1982-1990. Visiting professor, Universite Paris Dauphine, 2000, Lecturer, World Bank and Joint Vienna Institute Comprehensive Course, 1993-present. Lecturer, Central European University, 1994. Researcher at EI, 1994 - present. Assistant Professor, CERGE, 1995 - present. Ph.D. in Economics, CERGE, 1996.

IV. Academic Calendar 2003-2004

Month	September				October				November				December				January				February				March				April				May				June				July				August							
Week	1-5	8-12	15-19	22-26	29-3	6-10	13-17	20-24	27-31	3-7	10-14	17-21	24-28	1-5	8-12	15-19	22-26	29-2	5-9	12-16	19-23	26-30	2-6	9-13	16-20	23-27	1-5	8-12	15-19	22-26	29-2	5-9	12-16	19-23	26-30	3-7	10-14	17-21	24-28	31-4	7-11	14-18	21-25	28-2	5-9	12-16	19-23	26-30	2-6	9-13	16-20	23-27
First year students	Fall semester												Christmas holidays				Spring semester												Summer semester												Summer holidays											
	A/D	•			M	•			•				F				A/D	U	U		M				•				F				•	•			M				•				F				G			
Second year students	Fall semester												Christmas holidays				Spring semester												Directed research seminar				Summer holidays																			
	A/D	•			M	•			•				F				A/D	U	U		M				•				F				•	•			G				•											
Third and Fourth year students	Research seminar series												Christmas holidays				Research seminar series												Summer holidays																							
					•				•				•								U	U							•				•	•							•											
Preparatory semester																													Preparatory semester																							
																													M				F																			

- A/D** Add/drop period
- G** General-exams weeks
- F** Final-exams week
- M** Midterm-exams week
- U** Make-up General-exams weeks
- National holidays:

V. Schedules for the Fall Semester 2003

The schedules are subject to change. Most recent versions are at <http://www.cerge-ei.cz/internal/study/>

A. First year students

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
08:30 – 10:00			Microeconomics I Exercises #320		Macroeconomics I Exercises #320
10:00 – 10:45	Coffee Break				
10:45 – 12:15	Microeconomics I. <i>Dušek</i> #320		Statistics <i>Zigic/Slobodyan</i> #320	Macroeconomics I <i>Slobodyan/Kejak</i> #320	
12:15 – 13:30	Lunch Break				
13:30 – 15:00	Academic Writing I <i>Stock/Latham</i> #314/#12	Macroeconomics I <i>Slobodyan/Kejak</i> #320	Academic Writing I <i>Stock/Latham</i> #314/#12	Microeconomics I <i>Dušek</i> #320	
15:00 – 16:30	Academic Writing I <i>Smith/Latham</i> #314/#313		Academic Writing I <i>Smith/Latham</i> #314/#313	Statistics <i>Zigic/Slobodyan</i> #320	
16:30 – 18:00	Research Seminar #6		Statistics Exercises #320	Research Seminar #6	

B. Second year students

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
08:30 – 10:00	Financial Markets I <i>Zemčík</i> #11	Money and Credit I <i>Exercises</i> #313	Public Economics <i>Exercises</i> #313	Econometrics III <i>Exercises</i> #313	Ind. Organization <i>Exercises</i> #313
10:00 – 10:30	Coffee Break				
10:30 – 12:00	Money and Credit I <i>Boháček</i> #313	Econometrics III/AECS <i>Kočenda/Peck</i> #11/#314	Public Economics <i>Austin</i> #313	Econometrics III/AECS <i>Kočenda/Peck</i> #11/#314	AECS <i>Tba</i> #11
12:00 – 13:30	Lunch Break				
13:30 – 15:00	AECS <i>Smith/Mentz</i> #11/#10	Public Economics <i>Austin</i> #313	Ind.Organization I <i>Shaked-Zigic</i> #313	Money and Credit <i>Boháček</i> #313	Financial Markets I <i>Exercises</i> #313
15:00 – 16:30	AECS <i>Tba</i> #11	Industrial Organization I <i>Shaked-Zigic</i> #313	Fin. Markets I <i>Zemčík</i> #320	AECS <i>Smith/Mentz</i> #11/#10	Transition <i>Exercises</i> #313
16:30 – 18:00	Research Seminar #6	Transition <i>Lizal</i> #313	Transition <i>Lizal</i> #313	Research Seminar #6	

Tba ... to be announced later

Notes:

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Notes: