# **GOKHALE INSTITUTE OF POLITICS AND ECONOMICS**

Deemed to be University u/s 3 of the UGC Act, 1956 PUNE 411004

# M.Sc. (ECONOMICS) SYLLABUS

(Effective from academic year 2014-15)

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# A-01: MICROECONOMICS - I

#### **PREAMBLE**

This course is the first attempt to develop the theoretical structure of microeconomics. The objective of this course is to develop an understanding of the basic principles of microeconomics. It is intended to improve student's analytical skills and ability to solve problems, which will be useful in several other areas of economics. By the end of this course the student is expected to be familiar with basic concepts of microeconomics and acquire analytical skills to analyse problems of economic policy. Examples and exercises would be covered to provide a flavour of various applications.

It does not require any previous knowledge of microeconomics. Familiarity with calculus and optimisation theory will be helpful. Relevant mathematical tools will be developed during the course whenever necessary.

# **Module 1: Consumer Theory**

Preference relation and its properties. Consumer preferences and representation of preferences by utility functions. Budget constraint, Utility maximization and derivation of demand function, Indirect utility function and its properties, Roy's identity, Expenditure function, Shephards lemma, Inverse demand functions, The money metric utility functions. Comparative statics, The Slutsky equation, Properties of demand function Comparative statics using first order conditions, The integrability problem. Revealed preferences. Endowments in the budget constraint, Labour leisure trade off. Consumer's surplus, Compensating and Equivalent Variations

# **Module 2: Theory of Firm**

Theory of organisation. Measurements of inputs and outputs, Specification of technology – production Function, Returns to scale and other properties of production sets, Technical rate of substitution and elasticity of substitution. Profit maximization, Comparative statics, Profit function. Hotelling's lemma, Factor demand functions, Supply function. Cost minimisation, Cost functions, Average and marginal cost functions, Short run and long run costs, Marginal cost pricing, aggregation – industry supply function, Shephard's lemma, Conditional factor demand functions. Duality between production and cost functions.

# Module 3: Theory of Market I: Perfect Competition, Monopoly, and Monopolistic Competition

Perfect competition: short run and long run market equilibrium. Efficiency and welfare. – Critiques of P. Sraffa, and J. Robinson. Monopoly: Monopoly power, Equilibrium output and prices, Effect on welfare, Price discrimination – first, second, and third degree, Quality choice under monopoly. Monopolistic Competition

# Module 4: Game theory (basic introduction)

Description of a game, Normal form representation of game, Extensive form representation of game, Solution concepts—Nash Equilibrium, Mixed strategies, Repeated games, Sequential games, Refinement: Sub-game perfection.

# Module 5: Theory of Market II: Oligopoly

Cournot equilibrium, stability, comparative statics, welfare. Bertrand equilibrium.Quantity leadership, Price leadership. Conjectural variations. Spatial competition: Linear city model, Circular city model.

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# **BASIC READING LIST**

- Ferguson, C. E. (1969), The Neoclassical Theory of Production and Distribution, Cambridge University Press.
- Gravelle, H. and Rees R. (2003), Microeconomics, 3<sup>rd</sup> Edition, Prentice Hall
- Kreps, David (1992), A Course in Microeconomic Theory, Eastern Economy Edition, Prentice Hall of India
- Varian, Hal R. (1992), Microeconomic Analysis, 3<sup>rd</sup> Edition, International Student Edition, W. W. Norton and Company
- Williamson, O. E. and Winter, Sidney G. (Eds) (1993), The nature of the firm; origins, evolution and development, Oxford University Press

#### ADDITIONAL READING LIST

#### Module 1

- Deaton, A. and Muellbauer (1993), Economics and Consumer Behaviour, Cambridge University Press.
- Gravelle, H. and Rees, R. (2003), Microeconomics, 2003, 3<sup>rd</sup> Edition, Prentice Hall.
- Green, H. A. G. (1971), Consumer Theory, Penguin, Harmondsworth.

#### Module 2

- Archibald, G. C. (Ed.) (1971), Theory of the Firm, Penguin, Harmondsworth.
- Bronfenbrenner, M. (1979), Income Distribution Theory, Macmillan, London.
- Gravelle, H. and Rees R. (2003), Microeconomics, 3rd Edition, Prentice Hall
- Healthfields and Wibe (1987), An Introduction to Cost and Production Functions, Macmillan, London.
- Pindyck, Robert S. and Rubinfield, Daniel L. (1998), Microeconomics, Prentice Hall

#### Module 3

- Archibald, G. C. (Ed.) (1971), Theory of the Firm, Penguin, Harmondsworth.
- Bain, J. (1958), Barriers to New Competition, Harvard University Press, Harvard.
- Pindyck, Robert S. and Rubinfield, Daniel L. (1998), Microeconomics, Prentice Hall.
- Tirole, Jean (1996), Theory of Industrial Organisation, Eastern Economy Edition, Prentice Hall of India.
- Williamson, O. E. and Winter, Sidney G. (Eds) (1993), The nature of the firm; origins, evolution and development, Oxford University Press.

# Module 4

Gibbons, Robert (1992), Game Theory for applied economists, Princeton University Press.

# Module 5

- Gravelle, H. and Rees, R. (2003), Microeconomics, 3rd Edition, Prentice Hall.
- Gibbons, Robert (1992), Game Theory for applied economists, Princeton University Press.
- Tirole, Jean (1996), Theory of Industrial Organisation, Eastern Economy Edition, Prentice Hall of India.

# A-02: MICROECONOMICS - II

#### **PREAMBLE**

This is the second part of the core Microeconomics Sequence. This course introduces fundamental concepts and topics developed in microeconomic theory. It will cover roughly 4 topics: 1) Theory of General Equilibrium, 2) Economics of Uncertainty, 3) Games of Incomplete Information and 4) Information Economics. The aim is to be as through as possible in a single semester time period. The theoretical tools developed in these topics are essential in many different fields in economics.

# Module 1: Theory of General Equilibriums

We will focus on GE with certainty.

<u>First Level</u>: Introduction – partial equilibrium vis-à-vis general equilibrium approach. Exposition of basic concepts. An elementary general equilibrium model – the Robinson Crusoe economy. Pure exchange economy – the Edgeworth Boxes, Pareto optimality, contract curve, core, Walras Law, Walras equilibrium. First and second fundamental theorem of welfare economics (graphical exposition).

<u>Second Level</u>: Refreshment of analytic and scarcity properties of preference relation. A more elaborate exposition of the exchange economy: commodities, agents, preferences, utility functions, prices, demand and excess demand functions and their properties. Formal definition of allocation, Pareto optimal allocation, individually rational Pareto optimal allocation, coalition, and core. Walras equilibrium, its relation with core. Formal proof of first fundamental theorem. Gross substitutability. Price adjustment process. Brower's fixed point theorem. Existence of Walras equilibrium and Uzawa equivalence theorem. Social welfare maximization and its relation with Pareto optimality. General conditions for uniqueness, and discussion of stability – Tatonnement process. General equilibrium over time – Arrow Debreu scarcity (introduction only). Re-switching and reverse capital deepening.

# **Module 2: Economics of Uncertainty**

Measures of risk -- Domar-Musgrave index, Roy's safety index, Mean-Variance, Semi variance. Mini-max regret. Lotteries, preference relation over lotteries, N-M expected utility theory – basic axiom and representation theorem; violations of EU theory. Subjective probabilities. Risk aversion – Jensen's inequality, Acceptance set and risk aversion, various measures of risk aversion (Arrow-Pratt measure of absolute risk aversion, relative risk aversion), certainty equivalent and risk premium, Arrow-Pratt approximation of risk premium, Pratt's theorem, DARA, CARA, IARA, DRRA, IRRA, CRRA classes of utility functions and their comparative static properties; Applications to various settings and comparative static results. Stochastic dominance criterion of ordering risky prospects, and equivalence between expected utility criterion and stochastic dominance criterion.

# **Module 3: Games of Incomplete Information**

Static Bayesian games and Bayesian equilibrium – theory and examples.

#### **Module 4: Information Economics**

Introduction. The elements of the problem. Types of Asymmetric information problems – moral hazard, adverse selection, signalling.

Static Moral Hazard: Full information Benchmark, Hidden action in a Two action-Two outcome model as well as in a simple Continuous action and continuous outcome case, Solution through First order approach and its validity, Value of information and characteristics of the Optimal contract

Adverse selection and Signalling: Akerlof's Model of Lemons, Brief exposure to Mechanism Design and Revelation Principle, Intuition behind Spence-Mirrlees Single Crossing Condition. Signalling in the Spence's Model of Education, the notions of Pooling and Separating Equilibria.

#### BASIC READING LIST

- Mas-Colell, Andrew Michael., Whinston, D. and Green, Jerry R. (1995), Microeconomic Theory, Oxford University Press.
- Varian, Hal R. (1992), Microeconomic Analysis, 3<sup>rd</sup> Edition, International Student Edition, W. W. Norton and Company.

#### ADDITIONAL READING LIST

#### Module 1:

- Broadway, R. W. and Bruce, N. (1984), Welfare Economics, Basil Blackwell, London.
- Debreu, G. (1959), Theory of Value, An Axiomatic Analysis Of Economic Equilibrium, John Wiley & Sons.
- Ellickson, Bryan (1993) Competitive Equilibrium; Theory and Applications, Cambridge University Press.
- Green, H. and Walsh, V. (1975), Classical and Neo-Classical Theories of General Equilibrium, Oxford University Press, London
- Hansen, B. (1970), A Survey of General Equilibrium Systems, McGraw Hill, New York.
- Hilderbrand, W. and Kirman, A. P. (1988), Equilibrium Analysis; Variations on Themes by Edgeworth and Walras, North-Holland.
- Kreps, David (1988), Notes on theory of choice, Westview Press.
- Martin, J. Osborne and Ariel Rubinstein (1994), A course in game theory, MIT Press.
- Quirk, J. and Saposnik, R. (1968), Introduction to General Equilibrium Theory and Welfare Economics, McGraw Hill, New York.
- Starr, Ross M. (1997), General equilibrium theory; An introduction, Cambridge University Press.
- Weintrub, E. R. (1974), General Equilibrium Theory, Macmillan, London.

#### Module 2:

- Arrow, K. J. and Intrilligator, M. D. (1981), Handbook of Mathematical Economics, Vol. I, North Holland, Amsterdam.
- Borch, K. H. (1968), The Economics of Uncertainty, Princeton University Press, Princeton.
- Diamond and Rothschild (Eds.) (1978), Uncertainty in Economics, Academic Press, New York.

#### Module 3:

- Fudenberg, D. and Tirole, J. (1996), Game Theory, MIT Press.
- Gibbons, R. (1992), Game theory for applied economists, Princeton University Press.
- Osborne, Martin J. and Rubinstein, Ariel (1994), A course in game theory, MIT Press.

#### Module 4:

- Bolton, Patrick and Dewatripont, Mathias (2005), Contract theory, MIT Press.
- Fudenberg, D. and Tirole, J. (1996), Game Theory, MIT Press.
- Gibbons, R. (1992), Game theory for applied economists, Princeton University Press.
- Osborne, Martin J. and Rubinstein, Ariel (1994) A course in game theory, MIT Press.

# A-03 – MACROECONOMICS

**Objective:** The objective of the paper is to familiarize the students about the contribution of various schools of thought in macroeconomics towards the determination of output and employment. The course structure covers all the major macroeconomic debates in this area.

**Module I: Background Concepts:** History of macroeconomic thought- Classical, Keynesian and schools of thought in macroeconomics after Keynes- Determination of output and employment.

#### Module II: Behavioral foundations of Macro Economics

- 1. **Consumption Function**: Keynes Psychological Law and Kuznet's consumption puzzle, Fisher's inter-temporal Choice Model, Permanent Income Hypothesis, Life Cycle Hypothesis and Relative Income Hypothesis.
- 2. **Investment Function**: Neo-Classical Theory of Investment, Stock Market and Tobin's q-ratio, Accelerator Theory of Investment (simple and flexible acceleration models)

**Module III: The Orthodox Keynesian School:** The orthodox Keynesian School- the IS-LM model for a closed economy- Underemployment equilibrium in the Keynesian Model- the IS-LM model for an open economy- IS-LM-BP model of Mundell-Fleming- the Philips Curve and orthodox Keynesian economics.

**Module IV: The Monetarist School:** The quantity theory of money approach- the expectation augmented Philips cure analysis- the orthodox monetary school and stabilization policy.

**Module V: Micro Foundations of real and nominal rigidities and New Classical School:** Perfect Information-Rational expectations hypothesis - Lucas critique- Imperfect and asymmetric information- Barro-Ricardo equivalence and fiscal policy.

**Module VI: Real Business Cycle School:** Real Business Cycle School and inter temporal substitution of labour- Real Business Cycle theory- technology shocks- neutrality of money and flexibility of wages and prices- Real Business cycle view on great depression.

**Module VII:** Micro Foundations of real and nominal rigidities: New Keynesian School: Imperfect competition and price setting- Real rigidity- Co-ordination failure models- Real Non Walrasian Theories- Small Menu Cost model and Staggering of prices, implicit wage contract theory- efficiency wage theory- Insider- Outsider model.

**Module VIII: Growth: The long and medium run:** Harrod- Domar Model- the Solow growth model and its application to convergence of country growth rates- the micro foundations of growth- Ramsey model with infinitely lived agents- Application to household behavior and interaction with the government- Ricardian equivalence- The New Growth theory- R&D, Human Capital in growth theory.

# BASIC READING LIST

- Barro, Robert J. & Sala-i- Martin, Xavier (1995), Economic Growth, MacGrow Hill.
- Blanchard, Olivier (2000), Macroeconomics, Prentice Hall.
- Blanchard, Olivier and Stanley, Fischer (1989), "Lectures on Macroeconomics", The MIT Press
- Dornbusch, Rudiger, Fischer, Stanley & Startz, Richard (2004), Macroeconomics, 9<sup>th</sup> Edition, MacGrow Hill.
- Mankiw Gregory (2002), Macroeconomics, 5<sup>th</sup> Edition, Worth Publishers
- Romer, David (2003), Advanced Macroeconomics, 3<sup>rd</sup> Edition, Mc Grow Hill Publishers.
- Snowdon Brian and Vane Howard R, (2005) Modern Macroeconomics: Its Origin, Development and Current State, Edward Elgar Publishing Ltd.

# **A-04: MONETARY MACROECONOMICS**

**PREAMBLE:** This course covers the post-Keynes developments in monetary theory with special reference to the existence of general equilibrium in a monetary economy. The implications of introducing money in Walrasian and non-Walrasian economies and theories of disequilibrium dynamics will be covered in detail. The questions of monetary and credit policies and the workings of monetary policies with special reference to Indian economy will be analyzed.

## **Module 1: Definition of Money**

Nature, functions, types and evaluation of money
The debate relating to the definition of money
Liquidity theory
Gurley and Shaw Hypothesis
Alternative money stock measures
The quantity and components of money stock in India and broad trend in them

#### **Module 2: Supply of Money and Money Transmission Mechanics**

Base money, money multipliers, and role of financial intermediaries Factors affecting money supply Balance sheet of Reserve Bank of India

# **Module 3: Demand for Money**

Quantity theory of money
Demand for money
Keynesian theory of demand for money
Baumol-Tobin theory
Issues regarding endogenous and exogenous supply of money.

# Module 4: Money in Walrasian and non-Walrasian Economies and Theories of Disequilibrium Dynamics

Money in neo-classical models

Money in non-neo-classical models

Walrasian interpretation of Keynesian unemployment (Patinkin, Clower and Leijonhufvud)

Post-Keynesian interpretation (Sidney Weintraub, Paul Davidson, Kelecki and Minsky)

# **Module 5: Theories of the Interest Rate**

Real and monetary theories of the interest rate
Keynesian theory, Wicksellian theory, Fisher's theory, Hicksian theory
Credit market imperfections
Adverse selection and moral hazard

### **Module 7: Monetary Institutions & Monetary Policy**

Monetary transmission mechanism and targeting Inflation
Money growth and interest rates
Interest rate rules
Taylor rule
Rules versus discretion
Central Bank autonomy
Dynamic inconsistency of monetary policy credibility and reputation
Co-ordination of fiscal and monetary policy

# **BASIC READINGS**

 Mishkin Frederic (2007), The Economics of Money Banking and Financial Markets, 8<sup>th</sup> ed Addison Wesley Longman Publishers

- Bain, Keith & Howells, Peter (2009), Monetary Economics: Policy and Its Theoretical Basis, Palgrave.
- Friedman, Ben & Hahn F.H. (Eds.), (1990), Handbook of Monetary Economics, Vols. 1, 2, & 3, North Holland Publishers.
- Blinder Alan (1998), Central Banking in Theory and Practice, The MIT Press
- Langdana Farrokh (2009), *Macroeconomic Policy: Demystifying Monetary and Fiscal Policy*, 2<sup>nd</sup> Edition, Springer.

# A-05: ECONOMETRICS – I

**Objective:** The objective of this paper is to introduce some of the statistical and econometric techniques that are widely used in empirical work in economics and other related disciplines to students. It covers the problems faced in estimation and inference in the context of the single-equation linear regression model. The main objective of the paper is to teach students how to apply relevant econometric methods to analyse data and interpret the results from such analyses.

The focus is on conceptual understanding and 'hands on' applications using economic data drawn from real-world examples, rather than on formal theoretical proofs. By the end of the paper, students should be able to appreciate and interpret the econometric and statistical analysis reported in many studies in economics and be able to carry out and interpret their own econometric analysis.

**Module 1: Review of Basic Statistical and Mathematical Concepts:** Random variables and distribution, characteristics of distributions (expected value, variance, conditional expectation), sample and sampling distributions: Normal Distribution and related distributions (chi-squared, t- and F-distributions), Central Limit Theorem, estimators and estimation, properties of estimators, elements of Matrix Algebra, nature and scope and need for study Econometrics

Module 2: The Classical Linear Regression Model: Estimation and Inference: Ordinary least squares (OLS) estimation, the Classical assumptions, the Gauss- Markov theorem and properties of the OLS estimators, interval estimation and hypothesis testing and prediction, reporting and interpreting regression results, Maximum Likelihood techniques, Restricted Least Square estimation, Likelihood Ratio (LR), Wald and Lagrange Multiplier (LM) Test, Minimum Variance Bound (Rao- Cramer Inequality Theorem)

**Module 3: Non-linear regression: C**onversion of non-linear forms into linear forms, testing linear verses non-linear functional form, appropriateness and relevance of the choice of functional form

**Module 4: Binary (or Dummy) Variables:** Exogenous Dummy Variable- Formulating and interpreting coefficients on dummy explanatory variables, interactions involving dummy variables and use of dummy variables in seasonal analysis, piece wise regression analysis, the dummy variable alternative to chow test, Dependent Dummy variable - Linear Probability Model, Problems relating to LPM, Logit and Probit Model, Multinomial Choice Models: Ordered Response Model; Unordered Response Model, Censored and Truncated Regression Model

**Module 5: Violation of the OLS Assumptions:** Introduction, Consequences of violation of OLS assumption, GLS Estimation- Aitken's generalization of Gauss Marks Theorem, Estimation of  $\sigma^2$ . Hetroscedasticity & Autocorrelation: Causes and consequences and remedial procedural, diagnostic test

**Module 6: Multicollinearity:** Introduction, perfect verses imperfect Multicollinearity, Consequences, tests for detection and remedies for Multicollinearity.

**Module 7: Lagged Variables and Distributed- Lag Models:** Introduction, Consequences of applying OLS, Almon's lag approach, Koyak Transformation: Partial adjustment hypothesis and adaptive expectations hypothesis, estimation of distributed lag models etc.

**Module 8: Simultaneous Equation Models (SEM):** Introduction, Structural, reduced form and final form model, Rational behind the use of SEM - simultaneous bias and inconsistency of the OLS estimator, Problem of Identification: Rank and Orders conditions, Methods of estimation: ILS, 2SLS, Instrumental Variable, LIML (LVR), Mixed estimation Method, 3 SLS and FIML methods

Note: The students will be taught software packages for performing econometric applications. Computer exercises will be given to students.

#### BASIC READING LIST:

- Griffiths, Hill and Judge, Learning and Practicing Econometrics, Wiley, New York.
- Judge, G.G. et al., Introduction to the theory and Practice of econometrics, 2<sup>nd</sup> Edition John Wiley and Sons.
- Green, William H., **Econometric** Analysis, Prentice Hall.
- Johnston and Dinardo, Econometric Methods, 4<sup>th</sup> Edition McGraw-Hill International Edition.
- Madala G.S., Introduction to **Econometrics**, John Wiley & Sons.
- Madala, G.S. (1986) Limited Dependant and Qualitative Variables in Econometrics, Cambridge University Press, Cambridge.
- Wooldridge J., Introductory **Econometrics**: A Modern Approach, South-Western College Pub.
- Baltagi, Badi H. , Econometrics, 5<sup>th</sup> edition, Springer
- Kennedy, Peter (2003), A Guide to Econometrics, 5th Edition, The MIT Press
- Studenmund, A.H., Using Econometrics: A Practical Guide, Addison Wesley Publishing Company. Boston,
- Guajarati, Damodar, Basic Econometrics, 4<sup>th</sup> Edition, Tata McGraw Hill Publishing Company, New Delhi
- Mood, Alexander M, Graybill, Franklin A. and Duane C. Boes, (1974), Introduction to the Theory of Statistics, McGraw-Hill.
- Goldberger, S., Introductory Econometrics, Harvard University Press.
- Koutsoyiannis, A., Theory of **Econometrics**, St Martin's Press.
- Krishna, K. L., Econometric Application in India, Oxford University Press, Delhi.
- Larsen, Richard J. & Marx, Morris L, An Introduction to Mathematical Statistics and its Application, 4<sup>th</sup> edition, Prentice Hall.
- Lewis-Beck, Michael S., Regression Analysis (Hand Book of Quantitative Application for social Science Volume 2, SAGE Publications Inc., 1:68
- Pindyck & Rubinfeld, Econometrics Models & Economic Forecast, 4<sup>th</sup> edition, McGraw-Hill/Irwin

# A-06: ECONOMETRICS II

**Module 1: Seemingly Unrelated Regression (SURE):** Estimation by OLS, GLS and FGLS, testing for structural change and aggregation bias, case of autoregressive errors

#### Module 2: Panel Data

- **2.1 Introduction Panel Data**: Some Examples, Benefits and Limitations
- **2.2 The One-way Error Component Regression Model**: Introduction, The Fixed Effects Model, The Random Effects Model, Fixed vs Random, Maximum Likelihood Estimation, Prediction
- **2.3.** The Two-way Error Component Regression Model: Introduction, The Fixed Effects Model, Testing for Fixed Effects, The Random Effects Model, Maximum Likelihood Estimation, Prediction
- **2.4 Test of Hypotheses with Panel Data:** Tests for Poolability of the Data, Tests for Individual and Time Effects: The Breusch–Pagan Test, King and Wu, Honda and the Standardized Lagrange Multiplier Tests, Gourieroux, Holly and Monfort Test, Conditional LM Tests, ANOVA F and the Likelihood Ratio Tests; Hausman's Specification Test
- 2.5 Introduction to Dynamic Panel Data Models

#### **Module 3: Time Series:**

- 3.1 **Stationary Time-Series Models**: Stochastic Difference Equation Models, ARMA Models, Stationarity, Stationarity Restrictions for an ARMA(p, q) Model, The Autocorrelation Function, The Partial Autocorrelation Function, Sample Autocorrelations of Stationary Series, Box–Jenkins Model Selection, Properties of Forecasts, A Model of the Interest Rate Spread, Seasonality, Parameter Instability and Structural Change.
- **3.2 Models with Trend**: Deterministic and Stochastic Trends, Removing the Trend, Unit Roots and Regression Residuals, The Monte Carlo Method, Dickey–Fuller Tests, Examples of the ADF Test, Extensions of the Dickey-Fuller Test, Structural Change, Power and the Deterministic Regressors, Panel Unit Root Tests, Trends and Univariate Decompositions
- 3.3 **Multiequation Time-Series Models:** Intervention Analysis, Transfer Function Models, Estimating a Transfer Function, Limits to Structural Multivariate Estimation, Introduction to VAR Analysis, Estimation and Identification, The Impulse Response Function, Testing Hypothesis, Structural VARs., The Blanchard and Quah Decomposition.
- **3.4 Cointegration and Error-correction Models**: Linear Combinations of Integrated Variables, Cointegration and Common Trends, Cointegration and Error Correction, Testing for Cointegration -The Engle–Granger Methodology, Illustrating the Engle-Granger Methodology, Cointegration and Purchasing-Power Parity, Characteristic Roots, Rank, and Cointegration, Hypothesis Testing, Illustrating the Johansen Methodology, Error-Correction and ADL Tests, Comparing the Three Methods
- **3.5 Modeling Volatility:** Economic Time Series- The Stylized Facts, ARCH Processes, ARCH and GARCH Estimates of Inflation, A GARCH Model of Risk, the ARCH-M Model, Additional Properties of GARCH Processes, and Maximum Likelihood Estimation of GARCH Models.

Note: The students will be taught software packages for performing econometric applications. Computer exercises will be given to students.

# **Basic Reading List**

- Baltagi, B.H. (2008), Econometric Analysis of Panel Data, 4th Edition, Wiley
- Wooldridge, J. (2002), Econometric analysis of Cross Section and Panel Data
- Wooldridge, J. (2009), Introductory **Econometrics**, 4th Edition, South-Western College Pub.
- Hsiao, C. (2003), Analysis of Panel Data, Cambridge University Press, Cambridge.
- Walter Enders (2008), Applied Econometrics Time series, Wiley India
- Hamilton, JD (1994) Time Series Analysis. Princeton University Press, New Jersey.
- Judge, G.G., Griffiths, W.E., Hill, R.C., Lutkepohl, H. and Lee, T.C. (1985), The Theory and Practice of Econometrics, 2nd edition John Wiley and Sons, New York.
- Johnston, J. and Dinardo, D., Econometric Methods, McGraw Hill, New York.
- Lutkepohl, Helmut (2007) New Introduction to Multiple Time Series Analysis, Springer, New York
- Rao, P., Miller, R. L. (1971), Applied Econometrics, Wadsworth Publishing Company.

# A-07: ECONOMICS OF DEVELOPMENT

## **PREAMBLE**

The main objective of the course is to familiarize students with the problem of development in underdeveloped and developing economies. The focus of the course is to: (1) understand the economic development of the developing countries of Asia, Africa, Latin America, and Eastern and Central Europe; (2) analyze the economic problems of developing countries, especially problems related to slow growth, stagnation, high poverty rates, high income inequality, and chronic external crises; (3) discuss strategies for accelerating growth, attaining sustainable development, reducing poverty and income inequality, and decreasing external imbalances and (4) to discuss the major theoretical developments in this area of economics.

Module 1: Development, Scope of Development Economics and Development Indicators/Measurement Issues
Background and beginnings of 'Development Economics': post-war world economic order and end of formal
colonialism; distinction between growth and development economics/studies – The concept of development –
Evolution of Measures of Economic Development, Human Development Index and its extensions, modifications,
and offshoots

## Module 2: Major themes/perspectives of post-war 'high development theory' (late 1940s to 1970s)

Vicious circle of poverty; big push, balanced and unbalanced growth, dual-economy models – broad policy implications (Lewis, Ranis-Fei, Jorgenson models and limitations) – Rural-urban migration and urban unemployment (Harriss-Todaro model and extensions), Rural-urban wage-gap (Labour turnover model and wage-efficiency model – their extensions and limitations) – Political Economy of development and underdevelopment; dependency school and its critique

# Module 3: Economic Performance/progress of developing countries over the recent past

East Asian Miracle – East Asian Crisis – Latin American Economic Development – Indian Economic Performance and Reforms – China's economic development and reforms – Africa's Development Experience

# Module 4: Contributions and Applications of 'New Growth Theory' to Development Economics

Human capital and development; endogenous technological progress and development

Module 5: Contributions and Applications of 'New Institutional Economics' to Development Economics

Market failures, government failures, role and emergence of institutions, role of state in economic development

Module 6: Population, Development, and Environment

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#### **BASIC READING LIST**

- Bardhan, P. and C. Udry (1999), Development Microeconomics, Oxford University Press
- Basu, K. (2003), Analytical Development Economics: The Less Developed Economy Revisited, The MIT Press.
- Meier, G. and J. Rauch (2004), Leading Issues in Economic Development, 7<sup>th</sup> edition.
   Oxford University Press.
- Ray, D. (1998), Development Economics, Princeton University Press.
- Thirlwall, A.P. (2006), Growth and Development, 8<sup>th</sup> edition, Palgrave Macmillan.

## ADDITIONAL READING LIST

# Module 1:

- Alkire, S. (2002), Valuing Freedom: Sen's Capability Approach, New Delhi: OUP.
- Bardhan, P. and C. Udry (eds) (2000), 1<sup>st</sup> edition, Readings in Development Economics, The MIT Press.
- Meier, G. and J. Rauch (2005), 8 edition, Leading Issues in Economic Development,. Oxford University Press, USA.
- Meier, G. (2001), The Old Generation of Development Economics and the New, In: G. Meier and J. Stiglitz (eds), Frontiers
  of Development Economics, World Bank.

- Mozaffar, Q. (1996), 'Capabilities, Well-being and Human Development: A survey', Journal of Development Studies, 33:143-162.
- Mynt, Hla (1987), 'The neo-classical resurgence in development economics: its strength and limitations', in G.M. Meier (ed) (1987), Pioneers in Development, Second Series, World Bank.
- Nussbaum, M. (1995), "Human Capabilities, Female Human Beings', In: Nussbaum, M. and J. Glover (eds): Women, Culture and Development: A study of human capabilities, Delhi: OUP.
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  - World Bank 1998
  - o China Human Development Report 1999: Transition and the State
  - Human Development Reports

#### Module 4:

- Bardhan, P. (1995), 'The Contributions to Endogenous Growth Theory to the Analysis of Development Problems' In:
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- Dasgupta, P. (2004), 'World Poverty: Causes and Pathways', In: Bourguignon, F. and B. Pleskovic (eds): Accelerating Development, Oxford University Press New York.
- Dasgupta, P. (2003), 'Population, poverty and natural environment' In: K. Maler and J. Vincent (eds): Handbook of Environmental Economics, Vol.1. North-Holland. Pp. 191-247.
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- Drèze, J. and A. Sen (2002), India: Development and Participation, Oxford University Press New Delhi.

# **A-08: PUBLIC ECONOMICS**

#### Module 1: Preliminaries

- Introduction to positive and normative public economics.
- Institutional mechanisms for resource allocation: markets, government, firms and households.
- Size of government: Positive explanations and their evaluation Publicly provided goods and services: evidence transfers and taxes evidence.

# Module 2: Economic Rationale of the Modern State and Macro Economic Perspective of Public Finance

- Issues related to market failure and the government intervention
- The role of State in Allocation, Distribution, Regulation and Stabilization.
- The changing role of the State: Issues in a globalizing world with special emphasis on global public goods.
- Macroeconomics of Public Finance: The interaction between fiscal and monetary policy and fiscal stabilization.

# **Module 3: Economic Analysis of Public Goods**

- Public goods: pure and impure public goods.
- Optimal provision of public goods voting and public choice preference revelation mechanisms Lindahl and successors, free riding, mobility.
- The theory of clubs and local public goods.
- Public goods and the private cost of public goods- Pseudo- market mechanism for Preference Revelation.

# Module 4: Economic decision making in government

- Normative social choice theory Arrow's theorem majority voting The median voter model representative democracy.
- Positive social choice theory: The Leviathan hypothesis rent seeking lobbying and interest groups.

# **Module 5: Public Expenditure Theory**

- Pure theory of public expenditure. Canons of public expenditure
- Empirical evidence on public expenditure theories.
- Public Sector Pricing- Pricing of Public Utilities.
- Public expenditure management and control
- Concept, measurement and magnitude of subsidies.
- Social infrastructure and financing of human development.

# **Module 6: Theory of Taxation**

- The conflict between efficiency and equity horizontal and vertical equity- welfare analysis with uncertainty.
- Shifting and Incidence of Tax: The Partial and General Equilibrium Analysis- the Harberger model
- Canons of taxation
- Theory of Optimal Taxation.
- Taxation and economic efficiency.
- Issues related to tax policy in developing countries.

# **Module 7: Fiscal Federalism**

- Theory of Fiscal Federalism: The decentralization theorem.
- Economic efficiency issues in multilevel government.
- Assignment issues in multilevel government.
- Theory of intergovernmental transfers.

# Module 8: Fiscal Imbalance and Management of Public Debt

- Measurement and macro-economic impact of deficits- alternative paradigms.
- The concept of budget.
- Fiscal deficit and interest rates: Analytical and empirical issues.
- Public debt burden and intergenerational equity.
- Issues related to public debt sustainability.

#### **READING LIST**

#### **Books**

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- Atkinson, A. and Stiglitz, J. (1980), Lectures in Public Economics, McGraw Hill, London.
- Auerbach, A., and M. Feldstein (1987), Handbook of Public Economics, Vol. 1 &2. North Holland, Amsterdam.
- Boadway, R. (1984), Public Sector Economics, 2<sup>nd</sup> Sub edition, Scott Foresman & Co., London.
- Cullis, J. And Jones, P. (1998), Public Finance and Public Choice, 2<sup>nd</sup> Edition, Oxford University Press, Oxford.
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   D. Irwin Inc., Homewood.
- Helpman, E., Razin, A. and Sadka, E. (1988) Editors, Economic Effects of the Government Budget, MIT Press, Cambridge, Mass.
- Jha, Raghbendra (1999), Modern Public Economics, Routledge, London and New York.
- Johansen, Leif, (1965), Public economics, North Holland Publishing Company, Amsterdam.
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- Myles, Gareth D. (1995), Public Economics, Cambridge University Press, Cambridge.
- Rosen, Harvey S. (1995), Public Finance 4<sup>th</sup> Edition, Richard D. Irwin, Chicago.
- Stiglitz, J.E. (1989) Economics of the Public Sector, W.W. Norton & Company, London.
- Thompson, F. And Green, M. T. (1998), Handbook of Public Finance, Marcel Dekker, New York.
- World Bank (1996), From Plan to Market, World Development Report, The World Bank, Washington DC.
- World Bank (1997), The State in a Changing World, World Development Report, The World Bank, Washington DC.
- World Bank (1999), Knowledge for Development, World Development Report, The World Bank, Washington DC.

#### **Articles**

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- Berry, Steven T. and Joel Waldfogel (1999): "Public Radio in the U.S.: Does it Correct Market" Public Radio in the U.S.: Does it Correct Market Failure of Cannibalize Commercial Stations?" Journal of Public Economics 71, 189-211.
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   Public Finance, 43(3). 206-210
- Charles Tiebout (1956): "A Pure Theory of Local Expenditures." JPE 64, 416-424.
- Coase (1974): The Lighthouse in Economics, Journal of Law and Economics, Vol. 17, No. 2. (Oct.1974), pp. 357-376
- Feldstein, Martin (2001) The Transformation of Public Economics Research: 1970-2000, NBER website.
- Harberger, A.C., 1962. The incidence of the corporation income tax. Journal of Political Economy 70(3), 215-240.
- James M. Buchanan (1965): An Economic Theory of Clubs, Economica, New Series, Vol. 32, No.125. pp. 1-14.
- Oates, Wallace, (1999): An Essay on Fiscal Federalism, Journal of Economic Literature, Vol. XXXVII.
- Samuelson, Paul A. (1954): "The Pure Theory of Public Expenditure." Review of Economics and Statistics, 387-389.
- Samuelson, Paul A. (1955): "A Diagrammatic Exposition of the Theory of Public Expenditures." Review of Economics and Statistics (Nov.)

# **A-09: INDIAN PUBLIC ECONOMICS**

#### Module 1: Introduction

- Constitutional Provisions with regard to taxation and public expenditure in India.
- The structure of tax laws- efficient tax administration- capacity and institutions.
- Functional specialization and autonomy- incentive structure for tax bureaucrats- external controls and grievance redressal.
- Introduction to budgets Centre and state government budgets in India.

#### Module2: Tax Policy Issues in India

- Indian Tax System: An assessment
- Practical Issues of Tax reforms in India
- An introduction to Value Added Tax
- Value Added Tax: Design, Issues and Options.
- An introduction to MODVAT, CENVAT and Goods and Services Tax (GST)
- Issues in the taxation of Services in India.

#### Module 3: Non Tax Revenue in India

- Issues related to non- tax revenue of Centre and States and its sharing.
- Pricing of public utilities in India

# Module 4: Public Expenditure Management in India

- Growth, nature and composition of public expenditure.
- Sustainability issues of Centre and State expenditure in India
- Issues related to subsidies in India
- Social Security and State level pension reforms.

# Module 5: Fiscal Policy in India

- Trends and developments in Indian Fiscal Policy.
- Recent experience with stabilization functions of India government.
- Fiscal Responsibility and Budget Management Act: An Evaluation.
- Trends in and Financing pattern of deficits in India and its macro-economic implications.
- Plan financing and its implications.

# Module 6: Fiscal Federalism in India

- Centre- State Financial relations in India- Constitutional provisions and various committee recommendations on sharing of revenue.
- Fiscal Decentralization in India in the context of 73rd and 74<sup>th</sup> Constitutional Amendments.
- Implication of recommendations of Finance Commission.
- Centrally Sponsored Schemes and its implications for federalism.
- Sub national fiscal reforms in India.

# **Reading List**

# **Books**

- Bagchi, A. and Stern, N. (1994): 'Tax Policy and Planning in Developing Countries', Oxford University Press, New Delhi.
- Bagchi, A (2005): Readings in Public Finance, Oxford University Press, New Delhi.
- Gulati, I. S. (1987): Centre-State Budgetary Transfers, Sameeksha Trust
- Mundle, S (1997): Public Finance Policy Issues for India, Oxford University Press, New Delhi
- NIPFP (1994): Reform of Domestic trade Taxes in India: Issues and Option, National Institute of Public Finance and Policy, New Delhi.

#### Articles

- Amaresh Bagchi, and P. Chakraborty (2004): Towards a Rational System of Centre-State Revenue Transfers, *Economic* and *Political Weekly*, June 26, pp. 2737-2747.
- Amaresh Bagchi (2006), India's Fiscal Management Post-Liberalisation Impact on the Social Sector and Federal Fiscal Relations, *Economic and Political Weekly*, September 30, 2006.
- Amaresh Bagchi (2006), Towards GST: Choices and Trade-offs, Economic and Political Weekly, April 8.
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- Ashok K. Lahiri (2000), Sub-National Public Finance in India, *Economic and Political Weekly*, Vol. 35, No. 18, pp. 1539-1549.
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- Govinda Rao M (2001), Taxing Services: Issues and Strategy, Economic and Political Weekly, October 20, 2001.
- Rao, M G. (2003): Reform in Central Sales Tax in the Context of VAT, Economic and Political Weekly, Vol.- XXXVIII, No.-6, pp. 627-636.
- Govinda Rao M. and Nirvikar Singht (2007), The Political Economy of India's Fiscal Federal System and its Reform, *The Journal of Federalism,* Volume 37(1), pp. 26-44.
- Gulati, I S (1991), 'Reducing the Fiscal Deficit: Soft and Hard Options', Economic and Political Weekly, July 20.
- Gulati, I. S. (1994): 'Calculating the Fiscal Deficit: A Note on Certain Capital Receipts', Economic and Political Weekly, 29(21): 1297
- Jeevan Kumar Khundrakpam and Sitikantha Pattanaik (2010), Fiscal Stimulus and Potential Inflationary Risks: An Empirical Assessment of Fiscal Deficitand Inflation Relationship in India, *Journal of Economic Integration*, Vol. 25, No. 4, pp. 703-721.
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- Mala Lalvani (2009), Persistence of Fiscal Irresponsibility: Looking Deeper into Provisions of the FRBM Act, *Economic* and *Political Weekly*, Vol. 44, No. 37, pp. 57-63.
- Narendra Jadhav and Balwant Singh (1990), Fiscal-Monetary Dynamic Nexus in India: An Econometric Model, Economic and Political Weekly, Vol. 25, No. 3. pp. 159-165.
- Patnaik, P. (2001): 'On Fiscal Deficits and Real Interest Rates', Economic and Political Weekly, 1160-1163.
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- Rakshit, M K (1994): Money and Public Finance Under Structural Adjustment: The Indian Experience', Economic and Political Weekly, 29(16-17): 923-937.
- Rangarajan C. and D. K. Srivastava (2008), Reforming India's Fiscal Transfer System: Resolving Vertical and Horizontal Imbalances, *Economic and Political Weekly*, Vol. 43, No. 23, pp. 47-60.
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- Shankar Acharya (2005), Thirty Years of Tax Reform in India, Economic and Political Weekly, May 14, 2005.

# A-10: INTERNATIONAL ECONOMICS – Pure Theory

#### **PREAMBLE**

The course provides a deep understanding about the broad principles and theories, which tend to govern the flow of trade in goods, services and capital — both short-term and long-term — at the global level. The contents of the paper, spread over different modules, lay stress on the theory and nature of the subject which, in turn, will greatly help them to examine the impact of the trade policies followed both at the national and international levels as also their welfare implications at macro level and the distribution of gains from trade to North and South with particular reference to India. The study of the paper under the present era of globalization will train the students about the likely consequences on income, employment and social standards and possible policy solutions.

#### Module 1:

Inter-regional versus international trade - Mercantilist doctrine of balance of trade - Adam Smith and absolute advantage theory of trade - Ricardo and comparative advantage, its limitations - production possibility curve - Community indifference curve - Gain from trade - Offer curve - Determination of international equilibrium price - Different concepts of terms of trade - Factors affecting terms of trade.

#### Module 2:

Comparative advantage in Heckscher Ohlin Model - definitions of factor abundance - relationship between factor prices and commodity prices - Factor price equilisation theorem - Factor intensity reversal - the empirical evidance on Heckscher Ohlin theory - the Leontief Paradox.

#### Module 3:

Recent explanations of the basis of trade in terms of technological lead, domestic market size and product cycle approach – Linder's hypothesis – Intra-industry trade.

#### Module 4:

The rationale of tariffs, quotas and subsidies – infant industry argument – tariffs and factor income distribution – Stolper-Samuelson Theorem – Rybczynski Theorem – tariffs, terms of trade and domestic prices – the optimum tariff rate – tariffs, subsidies and distortions in commodity and factor markets – effective rate of protection. Welfare implications of tariffs – Non-tariff barriers.

#### Module 5:

Effects of quotas and other quantitative restrictions – tariffs versus quotas.

# Module 6:

Theory of customs union – trade creation versus trade diversion – partial and general equilibrium approaches to the theory of customs union – static and dynamic affects.

#### Module 7:

Trade and growth – export led or outward looking industrialization – case of East Asian economies – import substituting or inward looking industrialization – Case of South Asian economies with special reference to India – Growth and terms of trade – immiserising growth – Foreign exchange constraint on growth – Savings gap versus foreign exchange gap controversy.

# Module 8:

Formation of regional trade blocs – European Economic Community, NAFTA, PAFTA, ASEAN, SAARC – Regional trade blocs and barriers to free flows of trade.

# Module 9:

GATT and its objectives – issues at successive rounds of discussion – new issues at Uruguay Round – Trade in services – UNCTAD and evolution of world trading arrangements – World Trade Organization and fair trade.

#### BASIC READING LIST

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- Bhagwati, Jagdish (1964), "The Pure Theory of International Trade", Economic Journal, Vol. 74, pp. 1-78.
- Borkakoti, J. (1998), International trade: Causes & Consequences, MacMillan, London.
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- Chacholiades, M. (1981), Principles of International economics, McGraw-Hill, New York.
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- Ethier, W. J. (1995), Modern International economics, 3<sup>rd</sup> edition, W.W. Norton & Co.
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- Heller, H. R. (1973), International trade: Theory and empirical evidence, 2<sup>nd</sup> Edition, Prentice-Hall, Englewood Cliff, New Jersey.
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- Neary, J. P. (1995), Readings in International Trade: Volume I, Welfare and Trade Policy; Volume II, Production Structure,
   Trade and Growth, International Library of Critical Writings in Economics, Edward Elgar, Cheltenham.
- Pugel & Lindert (1999), International economics, 11<sup>th</sup> edition, Irwin/McGraw-Hill, December 13.

#### ADDITIONAL READING LIST

#### Module 1:

- Batra (1973), Studies in the Pure Theory of International Trade, St. Martin's Press, August.
- Borkakoti, J. (1987), International trade: Causes & Consequences, Palgrave, MacMillan.
- Bhagwati, J. N. (1987), International trade: Selected readings, 2<sup>nd</sup> Edition, MIT Press, Cambridge, Mass.
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## Module 2:

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- Jhonson, Harry (1958), International trade & economic growth, Harvard University Press, Cambridge.
- Leontief, W. (1986), Input output economics, Oxford University Press, USA.
- Minhas, Bagicha S. (1962), "The Homohypallagic Production Function, Factor-Intensity Reversals, and the Heckscher-Ohlin Theorem," Journal of Political Economy, April, Vol. 70, pp. 138-156.
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# Module 3:

- Brander, James A. & Spencer, Barbara J. (1985), "Export subsidies and international market share rivalry," <u>Journal of International Economics</u>, Elsevier, Vol. 18(1-2), February, pages 83-100,
- Kravis, Irving B. (1956), "'Availability' and Other Influences on the Commodity Composition of Trade," Journal of Political Economy, Vol. 64, No.2, April, pp. 143-155.
- Krugman, Paul, (1979), A model of innovation, technology transfer & the world distribution of income, Journal of Political Economy, Vol. 87, April, pp. 253-266.
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#### Module 4:

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- Greenaway, David (1983), International trade policy: From Tariffs to the New Protectionism, Macmillan Publishers Limited, London.
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- Pearce & Batra, Theory of nominal tariffs & subsidies.

#### Module 5:

- Corden (1971), Theory of Protection, Clarendon Press, Oxford.
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#### Module 6:

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#### Module 8:

- Aggarwal, M. R. (1979), Regional Economic Cooperation in South Asia, S. Chand and Co., New Delhi.
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- Hoekman & Kastecki (1996), The political economy of the World trading system from GATT to WTO, Oxford University Press.
- Kindleberger, C.P. (1996), A History of Financial Crisis: Manias, Panics and Crashes, 3<sup>rd</sup> Edition, John Wiley and Sons, New York.
- Soloman, R. (1982), The International Monetary System 1945-1981, Harper and Row Publishers, New York.
- Tew, B. (1985), The Evaluation of the International Monetary System: 1945-85, Hutchinson.
- Whalley, John (1985), Trade Liberalization Among Major Trading Areas, Cambridge University Press, Mass.

# A-11: INTERNATIONAL ECONOMICS – Money and Finance

#### **PREAMBLE**

International Economics – Money and Finance covers the monetary (as opposed to pure aspects of trade covered in Paper I) aspects of international economic relations. Detailed treatment of balance of payment data and foreign exchange markets and their functioning is given. Modern developments in forex markets including forex derivatives markets are also covered. The three dominant theories of balance of payment adjustments under fixed and floating exchange rates viz. the Keynesian, the Monetary and Monetarist Approach and their policy implications are discussed. Finally the changing roles of IMF and World Bank in the evolving global order are covered.

# Module 1: Nature and concept of Balance of Payment (BOP)

Equilibrium and disequilibrium in BOP – role of international reserves – preliminary concepts about payments adjustments – domestic monetary and fiscal policies and BOP.

# Module 2: The market for foreign exchange

The demand for and supply of foreign exchange – fixed and flexible exchange rates – spot and forward markets for foreign exchange – speculation and arbitrage – role of expectations.

# Module 3: Foreign trade and national income

Foreign trade multiplier, national income and BOP – multiplier in the presence of foreign repercussions – international transmission of business cycles.

# Module 4: International economic policy and BOP adjustment mechanism

Automatic adjustment under gold standard – expenditure reducing and expenditure switching policies – Depreciation and elasticity approach – absorption approach – Multiple exchange rates – Exchange and trade controls.

# Module 5: Recent theories of exchange rate determination

Monetary model of BOP under fixed and floating exchange rate – Portfolio balance model – controversy regarding order in opening up of current and capital accounts – Effectiveness of domestic monetary and fiscal policies.

# Module 6:

Essentials of International Monetary Order under Bretton Woods – problem of international liquidity and role of SDR – regional monetary co-operation – ECU – Flexible exchange rates as an International Monetary Order – Changing role of IMF – IMF conditionalities – World Bank and Structural Adjustment Loan facility.

# Module 7:

Long term and short term international capital movements – Causes and consequences – The Transfer Problem – External debt – measuring the debt burden – Debt servicing – Third World debt problem with special reference to India – External debt versus foreign direct investment – Using international statistics in analysis of external debt.

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# **BASIC READING LIST**

# Module 1:

- Thirlwal, A.P (1999)., Balance of Payments Theory, 6th edition, Oxford University Press, New York
- Stern, R.M.(1973), The Balance of Payments, Aldine Publishing Company, New York
- Stern, R.M. (2007), Balance of Payments: Theory and Economic Policy, Aldine Transaction

# Module 1 & 2:

• Ramsaran Ramesh, (1998), An Introduction to International Money & Finance Palgrave 1st edition, Macmillan

#### Module 2:

• Stern, R.M., Forward Exchanges, Speculation and Arbitrage, Quantitative International Economies, Boston Ally and Bacon.

## Module 2 & 4:

• Heller, H.R (1974), International Monetary Economics, Prentice-Hall, Englewood Cliffs, N.J.

#### Module 2 & 5:

• Pilbearn, Keith (2006), International Finance, Palgrave Macmillan

#### Module 3:

Machlup, Fritz, (1943), International Trade & National Income Multiplier, The Blakiston Company

#### Module 3 & 4:

Chacholiades, M. (1978), International Trade Theory and Policy, McGraw Hill, New York.

#### Module 4:

- Dornbusch & Helmers (1988) Ed, The Open Economy, Oxford University Press, New York.
- Fleming, J.M. (1962), Domestic Financial Policies Under Fixed and Floating Exchange Rates, International Monetary Fund Staff Papers 9, pp. 369–379.
- Frankel, J.A. (1993), Monetary & Portfolio Balance Models of Exchange Rate Determination, MIT press, Cambridge.
- Pilbeam, K., (1998) Purchasing Power Parity & Floating Exchange Rate Experience International Finance, Macmillan.

#### Module 5:

- McCallum Bennett T. (1996), International Monetary Economics, Oxford University Press, New York.
- Alexander, S.S (1959), Effects of Devaluation on Trade Balance, American economic review, Vol.no.49, pp. 21-42
- Krenin & Officer, (1981) The Monetary Approach to the Balance of Payment: A Survey, The Review of Economics and Statistics, The MIT Press. Vol. 63, No. 1, Feb, pp. 29-34.
- Branson, W.H. (1977), Asset Markets and Relative Prices in Exchange Rate Determination, Sozialwissenschaftliche Annalen, 1, pp. 69—89.

# Module 6:

- Kenen, Peter B. (2008), International Economy, 4 edition, Cambridge university press
- Killick Tony Ed. (1984), The Quest for Economic Stabilisation, 1<sup>st</sup> edition, New York: St. Martin's Press
- Killick, T (1995), IMF Stabilisation Programme, Journal of Development Economics; Volume 32, No. 1, pp.158-178.

#### Module 7:

- Williamson, J (1973)., Surveys in Applied Economics: International Liquidity, The Economic Journal, Vol. 83, No. 331, pp 685-746. Sep.
- Batiz & Batiz, Balance of Payment Adjustments & International Capital Movements
- Gray, H Peter (1979), International Trade, Investment & Payment, MA Houghton Mifflin. Boston.
- Ramsaran, Ramesh, (1998), The International Monetary System, Palgrave MacMillan, New York
- Qanik, Peter J., Ower (1995)
  - 1. Issues in Capital Account Convertibility
  - 2. Experience with Capital Account Liberalization in Industrial Countries, Capital Account Convertibility: Review of Experience and Implications for IMF Policies, International Monetary Fund in its series IMF Occasional Papers with number 131.
- Mukherjee Smriti, Capital Account Liberalization & Flexible Exchange Rate

# ADDITIONAL READING LIST:

- Caves & Johnsan, (1968), Readings in International Trade, Homewood, IL-Irwin
- Yeager Leland B.(1966), International Monetary Relations Theory, History & Policy, The Journal of Finance, Blackwell Publishing for the American Finance Association, vii, pp 544-46
- Richard D. (1968), Readings in the Theory, Homewood, Ill. A.E.A.: Irwin, Inc.
- Salvatore, D., International Economics 8th edition John Wiley and Sons, Inc
- Clement, M. O (1967)., Theoretical Issues in International Economics, Houghton Mifflin Boston
- Ingram, J.C. (1993), International Economics, 2nd ed. HarperCollins, New York
- Batiz & Batiz (1994), International Finance & Open Economy Macroeconomics, Second Edition, Prentice Hall Publishers
- Zhang Peter G. (1998), IMF & Asian Financial Crisis, World Scientific, Singapore
- Claassen Emil-Maria, (1996) Global Monetary Economics, Oxford University Press

# **A-12: NATIONAL INCOME ANALYSIS**

- Concept of National Product. Concept of production. Production exchanged in the markets (a) Self-consumed produce, (b) Services of housewives, (c) Owner-occupied dwelling, (d) Other consumer durables, concept of value added by production. Problem of netting for intermediate products. Distinction between intermediate and final-product. Distinction between value added from a particular sector and the final product available from the sector. Maintaining capital intact-netting for depreciation Gross and Net Production. Domestic Product and National Product at market price and at factor cost. Disposable and personal income need for correction in view of environmental pollution.
- 2. Treatment of Government Sector, financial intermediaries and rest of the world sector.
- 3. Methods of income estimation. The product method, the income method, the expenditure method. The equivalence of these methods. Income estimation in India. Trends in respect of aggregate and sectoral income and factor shares in India.
- 4. Accounts for the producing sector, consuming sector, governing sector, the rest of world sector.
- 5. System of national accounts. The United Nations Accounting System.
- 6. Inter-temporal comparisons of National Income. Income at current and constant prices. Special prices of secular comparisons, such as new goods, quality changes, etc. International comparisons of National Income. Comparison in terms of purchasing power parity. The problem of deflation.
- 7. Concept of National Income in socialist countries.
- 8. National Income and Regional Income. Conceptual differences. Comparison and trends of Net Domestic Production of States in India.
- 9. Related tables of accounts input-output, flow of funds and social accounting matrix.
- 10. Physical Quality of Life Index and Human Development Index.

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## BASIC READING LIST

Sr.	Name of the Author	Title of the Book
1.	Ruggles and Ruggles	National income accounts and income analysis
2.	Studenski (P.)	Income of nations
3.	Beckerman (Wilfred)	An introduction to national income analysis
4.	Parchure Rajas	Flow of Funds
5.	Shoup (G.)	Principles of national income analysis
6.	Powelson	National income and flow of fund analysis
7.	Edey (Peacock) and Cooper	National income and social accounting
8.	Palmer (Edger Z.)	The meaning and measurement of national income
9.	Stone (E.) and Stone (G.)	International income and expenditure
10.	Parker (R. N.) and Harcourt (G. C.)	Reading in the concept and management of income
11.	Kuznets (Simon)	National income and industrial structure in Simon Kuznets economic
		change
12.	Sivasubramonian S.	The National Income of India in the Twentieth Century
13.	Minhas (B. S.)	National Income accounts & data systems
14.	Taylor (Lance)	Macro Models for Developing Countries
15.	V. K. R. V. Rao	Some reflections on the comparability of real national income of
		industrialised and underdeveloped countries, in Milton Gilbert (Ed.)
		Income and Wealth Series III
16.	United Nations	System of national accounts
17.	Rao (C. R.) Ed.	Data base of Indian economy
18.	Rubner (A.)	Three sacred cows of economics
19.	C. S. O. Govt. of India	National accounts statistics. Sources and methods. April 1980.
20.	Martaidya & Charles Perrig	Environmental Accounting: A Review of the Current Debate
21.	Hicks (J. R.)	The social framework

22. Usher Dan The price mechanism and the meaning of national income statistics Hicks (Mukheriee) & Ghosh 23. The framework of the Indian economy Regional income accounting in an under developed economy – a case 24. Chaudhary (M. D.) study of India 25. Morris (M. D.), McAlpin (M. B.) Measuring the condition of India's poor The systems of national accounts and material product balances 26. Lal (R. N.) V. K. R. V. Rao India's national income 950/1980 27. Roy Choudhury (U. D.) 28. National income accounting 29. Pradhan, Sahoo, Saluja A social accounting matrix for India 1994-95 30. Bartelmus Peter Implementation of environmental accounting: towards an operational 31. Polatoff & others The flow of funds Accounts: A frame work for financial Analysis 32. Deshpande Medha Flow of funds Accounts: frame work 33. **Economic Commission for Europe** A note on some aspects of national accounting methodology in Eastern Europe & the Soviet Union 34. **Accounting Principles** Parchure Rajas 35. Lal (R. N.) The Systems of National Accounts Chap. 8 - Flow-of-funds system of Accounts

#### **ADDITIONAL READING LIST:**

- Input-output Analysis: Circular Flow of Income and Industrial Interdependence, National Income and Product Accounting
  Conventions, Assembling I-O Accounts, Methods of Reallocation, Commodity by Industry Accounting, Producer's and
  Consumers' Prices, Accounting for Exports and Imports, Leontief Price and Output Systems, Ghosh Model, Supply and Use
  Tables.
- Social Accounting Metrics: SAM: Background and Concepts, Household Account, Value-Added Account, Balancing of SAM
  Accounts, SAM Multipliers.
- References: Dorfman, Robert, Paul A. Samuelson and Robert Solow (1958) "Linear Programming and Economic Analysts"
   New York: McGraw-Hill.
- Leontief, Wassily (1951a.) "Input-Output Economics," Scientific American, 185, 15-21.
- o 1951b. "The Structure of American Economy," 1919-1939. New York: Oxford University Press.
- o 1986. "Input-Output Economics" (Second Edition). New York: Oxford University Press.
- Bulmer-Thomas, Victor (1982) "Input-Output Analysis in Developing Countries," New York: John Wiley and Sons.
- Pyatt, Graham (1985) "Commodity Balances and National Accounts: A SAM Perspective," The Review of Income and Wealth, 31, pp. 155-169.
- Pyatt, Graham and Jeffery I. Round (eds.) (1985a) "Social Accounting Matrices: A Basis for Planning Washington. DC: World
- Stone, Richard (1997) "The Accounts of Society," *The American Economic Review,* 87, pp. 17-29.
- Stone, Richard and Giovanna Croft-Murray (1959) "Social Accounting and Economic Models" London: Bowes and Bowes.
- Leontief, Wassily (1970) "The Dynamic Inverse," in Anne P. Carter and Andrew Brody (eds.), Contribution to Input-Output Analysis, Vol.1 of Proceedings of the Fourth International Conference on Input-Output Techniques, Geneva, 196. Amsterdam: North-Holland, pp. 17-43.

# A-13 – MATHEMATICS FOR ECONOMIC ANALYSIS

# Module 1: Dynamic Analysis:

- 1.1 Differential and Difference equations
- 1.2 Systems of differential equations
- 1.3 Dynamic Optimisation and Bellman's Equations

#### Module 2: Mathematical Programming and game Theory

- 2.1 Linear Programming: Simplex method, Duality.
- 2.2 Sensitivity Analysis
- 2.3 Transportation problem
- 2.4 Assignment Problem
- 2.5 Game theory

#### Module 3: Development of Non-linear Programming

- 3.1 Introduction, Concave Programming- saddle point characterization, Differentiation and Unconstrained Maximum Problem- Differentiation and Unconstrained Maximum, The Quasi–Saddle-Point characterization
- 3.2 Some extensions: Quasi- Concave Programming; the Vector Maximum Problem; and Quadratic Forms, Hessian, and Second- order Conditions
- 3.3 Applications, Envelope Theorem, Duality, and related topics: some applications; Envelope Theorem; Elements of Micro Theory; Elasticities of Factor Substitution, Duality, and Translog Estimation
- 3.4 Classical Optimization: the Classical of Optimization; Comparative statics; the second order conditions and Cooperative statics- an example: Hicks- Slutsky equation

#### **Module 4: The Calculus of the Variations**

- 4.1 Elements & Spaces of function and the Calculus of Variations
- 4.2 A Digression: The Neo-Classical Aggregate Growth Model
- 4.3 The Optimal Growth of an Aggregate Economy:
- 4.4 The Structure of the Optimal Growth Problem for an Aggregate Economy: Introduction, the case of Constant Capital: Output Ratio, Non Linear Production Function with Infinite Time Horizon

## Module 5: Development of Optimal Control Theory and Its Application

- 5.1 Pontryagin's Maximum Principle- Optimal Control: A simple Problem and the Maximum Principle, the Proof of Simple Case, Various Cases
- 5.2 The Neo-Classical Theory of Investment and Adjustment Costs- Introduction, the Case of No Adjustment Costs, the Case with Adjustment Costs
- 5.3 The two Classical Proportions of Welfare Economics: Introduction to the theory of Core; Some basic concept; theorem of Debreu and Scarf
- 5.4 Demand Theory: Various concepts of Semicontinuty and the maximum Theorem
- 5.5 The Existence of Competitive Equilibrium: Historical background, McKenzie's Proof
- 5.6 Programming, Pareto Optimum, and the existence of Competitive Equilibria

#### **Reading List**

- Akira Takayama, "Mathematical Economics", 2<sup>nd</sup> edition Cambridge University Press,
- 2. Robert Dorfman , Paul A. Samuelson, Robert M. Solow, "Linear Programming and Economic Analysis"
- 3. Carl Simon and Lawrence Blume , "Mathematics for Economists", W.W. Norton and Company.
- 4. A.C. Chiang, "Elements of Dynamic Optimisation", McGraw-Hill, 1992.
- 5. N.L. Stokey and R.E. Lucas, Jr, Harvard , "Recursive Methods in Economic Dynamics" University Press, 1989.

# A-14: POPULATION STUDIES AND HEALTH ECONOMICS

# A. Population Studies

Objective: This course seeks to impart a clear understanding of the interplay between demographic processes and economic development. It introduces major developments in demographic concepts and techniques by highlighting both quantitative and the qualitative aspects and characteristics of human population. The course is designed to enable students to gain a sound command over the basic tenets of demography as well as key demographic issues and illustrations in India's context.

**Module 1: Introduction and Sources of Population Data:** Meaning and scope of demography; demography as an inter-disciplinary field; Sources of population data: Population Censuses, Vital Registration, Sample Registration System and large-scale demographic surveys; Quality of demographic data (2 lectures).

**Module 2: Population Size, Growth and Characteristics:** Overview of the size and growth of world population by its major regions; Population composition by age and sex; Age pyramids; Determinants of age and sex structure, economic and social implications; Population momentum; Demographic window of opportunity; Population sex ratios and its variation; Population ageing; Social and economic implications of population ageing; Study of India's population size, growth and characteristics; Changing patterns of sex ratio in India (4 lectures).

**Module 3: Fertility and Nuptiality:** Concepts and measurements of cohort and period fertility; Indirect estimation of fertility rates; Fertility levels and differentials in developed and developing countries; Fertility levels and differentials in India; Intermediate variables affecting fertility; Proximate determinants of fertility; Family planning; Nuptiality – Concept and analysis of marital status, Singulate mean age at marriage; Trends in age at marriage and its significance (4 lectures).

**Module 4: Mortality:** Concepts and measurement of mortality; Standardisation of death rates; Life tables; Levels, trends and determinants of mortality in modern times; Causes of death and epidemiological transition; Differentials in mortality; Study of infant and child mortality in India - levels, trends, and determinants; Major child survival initiatives (4 lectures).

**Module 5: Migration:** Concepts and measurement of migration; Theories of migration related to internal migration; Causes and consequences of internal migration; differentials in migration; Trends and patterns of internal migration in India; Urbanization – growth and distribution of rural-urban population in developed and developing countries; Urbanization in India - its determinants and consequences (3 lectures).

**Module 6: Population Projection:** Importance of population projection; Component method of population projection; Projection of population at the sub-national level (2 lectures).

**Module 7: Population and Development:** How is population related to economic development – stimulus, unrelated, detrimental?; Optimists, pessimists and revisionists; Optimum population; Theory of Demographic transition – Notestein, Libenstein, Becker, Easterlin, Caldwell; Cleland and Wilson; Population and environment (4 lectures).

Module 8: Culture and Demographic Behaviour: Role of culture in demographic behaviour – key role of female status and autonomy in demographic behaviour; North-South divide in female autonomy and demographic outcomes and recent tendencies; Secular decline of India's female-male ratio, notion of 'missing women' and pervasive anti-female culture and son-preference; Gender biases in access to nutrition, health, and education; Status of women and female autonomy (in decision making, freedom of movements, and access and rights to resources and assets) – recent findings; Domestic violence (4 lectures).

**Module 9: Population Policy in India:** Evolution of population policy in India – the shift in policy from population control to family welfare, to women empowerment; Coercion versus cooperation as elements in population policy; From population control to reproductive health; Safe motherhood; Maternal mortality; Medical and non-medical benefits of reproductive health services to the individual, family, and community National Population Policy 2000 (3 lectures).

#### B. Health Economics

Objectives: To introduce economic concepts relevant to health care; To understand health care market – role of government, market failures; To understand resource allocation – efficiency; To understand equity in health care; To understand role of economics in health policy making

Module 1: Health Economics - emergence of sub-discipline; Economics of health, health care and medical care.

**Module 2:** Market structure in economics and their relevance to health care economics; Aspects of market failures, especially in health care and the need for the state intervention.

**Module 3:** Types of costs, outputs/outcomes and opportunity costs in the context of health care; Economic theories underpinning these concepts.

**Module 4:** Resource allocation to health sector; various sources of financing and resource allocation under different contexts; Issues of efficiency in resource allocation.

Module 5: Equity in health outcomes; Access, willingness-to-pay, subsidies, insurance, etc.

Module 6: Approaches to health finance such as National Health Accounts, Costing techniques, etc.

# **Reading List: Population Studies**

- Basu, A.M. (1989), Is Discrimination in Food Really Necessary for Explaining Sex Differentials in Childhood Mortality?
   Population Studies, 43:193-210.
- Bhat, M. (2002), Returning a Favour: Reciprocity between Female Education and Fertility, World Development, 39(10).
- Bhat, M. (2002), On the Trial of Missing Indian Females, Economic and Political Weekly, 37(51)(52): 5105-518, 5244-5263.
- Bhat, M. and F. Zavier (2003), Fertility Decline and Gender Bias in Northern India, Demography, 40(4):637-657.
- Bende, A.A. and T. Kanitkar (2000), Principles of Population Studies, Mumbai: Himalayan Publishing House.
- Birdsall, N. (1988), Economic Approaches to Population Growth. In H. Chenery, and T. Srinivasan (eds.), Handbook of Development Economics, North Holland.
- Birdsall, N., A.C. Kelley, and S.W. Sinding (2001), Population Matters, Oxford: Clarendon Press.
- Brokerhoff, M.P. (2000), An Urbanising World. Population Bulletin, Volume 55, Number 3. Washington: Population Reference Bureau.
- Cleland, J. (2001). The Effects of Improved Survival on Fertility: A Reassessment. In R.A. Bulatao. and J. Casterline (eds), Global Fertility Transition, Population Council, Supplement to Population and Development Review, Volume 27, 2001
- Cleland, J. and Wilson, C. (1987), Demand Theories of the Fertility Transition: An Iconoclastic View, Population Studies, 41:5-30
- Cleland, J. and G. Kaufmann (1998), Education, Fertility, and Child Survival: Unravelling the Links. In A.M. Basu and P. Aaby (eds.), The Methods and Uses of Anthropological Demography, Oxford: Clarendon Press.
- Croll, E. (2000), Endangered Daughters: Discrimination and Development in Asia, London: Routledge.
- Dasgupta, P. (2000). Population and Resources: An Exploration of Reproductive and Environmental Externalities, Population and Development Review, 26(4):643-689.
- Dyson, T. and Moore (1983), On Kinship Structure, Female Autonomy, and Demographic Behaviour, Population and Development Review, 9(1):35-60.
- Das Gupta, M. (1987), Selective Discrimination against Female Children in Rural Punjab, Population Development Review, 13(1):77-100.
- Drèze, J. and M. Murthi (2001), Fertility, Education, and Development: Evidence from India. Population and Development Review, 27(1).
- Dyson, T., R. Cassen and L. Visaria (2004), Twenty First Century India: Population, Economy, Human Development and the Environment, New Delhi: Oxford University Press.
- Hinde, A. (1998), Demographic Methods, New York: Oxford University Press.
- Jain, A.K. (1985), Determinants of Regional Variations in Infant Mortality in Rural India, Population Studies, Volume 39. Pp. 407-424.
- Jain A.K., and P. Visaria (1988), Infant Mortality in India: Differentials and Determinants, New Delhi: Sage Publications.
- Lee, R.D. (1986), Malthus and Boserup: A Dynamic Synthesis, In: D. Coleman and R.S. Schofield (eds), The State of Population Theory: Forward from Malthus, Oxford: Basil Blackwell.
- Mason, K.O. (1986), The Status of Women: Conceptual and Methodological Issues in Demographic Studies, Sociological Forum, 1(2):284-300.
- McFalls Jr, J.A. (1998), Population: A Lively Introduction, Population Bulletin, Volume 53, Number 3. Washington: Population Reference Bureau

- McNay, K. et al. (2003), Why are Uneducated Women in India Using Contraception: A Multilevel Analysis, Population Studies, 57(1):21-40.
- Mosley, W.H. and L.C. Chen (1984), An Analytical Framework for the Study of Child Survival in Developing Countries.
   Population and Development Review, Supplement to Volume 10. Pp. 25-45.
- Murthi, M., A-C. Guio, J. Drèze (1995), Mortality, Fertility and Gender Bias in India: A District-level Analysis, Population and Development Review, 21:745-782.
- Nag, M. (1988), A Framework for the Study of Proximate Determinants of Infant Mortality in Less Developed Countries. In Jain A.K., and P. Visaria (Eds.), Infant Mortality in India: Differentials and Determinants, New Delhi: Sage Publications.
- Newell, C. (1988), Methods and Models in Demography, New York: John Wiley and Sons.
- Pandey, A. M.K. Joe, N.Y. Luther, D. Sahu and J. Chand (1998), Infant and Child Mortality in India, National Family Health Survey Subject Reports. Number 11. Mumbai: International Institute for Population Sciences and Honolulu: East-West Programme on Population.
- Preston, S., P. Heuveline and M. Guillot (2003), Demography: Methods and Modelling Population Processes, Oxford: Blackwell Publishers.
- Sen, Amartya (1999), Development as Freedom, New York: Knopf.
- Shryock, H.S. and J.S. Siegel (1976), The Methods and Materials of Demography, New York: Academic Press.
- Srinivasan, K. (1999), Basic Demographic Techniques and Applications, New Delhi: Sage Publications.
- Sudhir, A. and J. Morduch (1998), Poverty and "Population Problem". In M. Livi-Bacci and G. De Dsantis (eds.), Population and Poverty in Developing World, Oxford: Clarendon Press.
- Population Reports (1983), Migration, Population Growth, and Development. Population Reports, Series M, No. 7.
   Maryland: Population Information Programme, The Johns Hopkins University.
- Population Reference Bureau (2000), Population Handbook (4th International Edition). Washington: Population Reference Bureau.
- Pressat, R. (1972), Demographic Analysis, Chicago: Aldine-Atherton
- Visaria, P. (1997), Urbanisation in India: An Overview. In Gavin W.J, and P. Visaria (Eds.), Urbanisation in Large developing Countries: China, Indonesia, Brasil, and India, Oxford, England: Clarendon Press.
- Weeks, J.R. (1996), Population: An introduction to Concepts and Issues, Belmont: Wadsworth Publishing Company.
- United Nations (2001), World Urbanisation Prospects: The 1999 Revision, New York: United Nations, Department of Economic and Social Affairs, Population Division.

# **Reading List: Health Economics**

- A.J. Culyer and J. Newhouse (2000), Handbook of Health Economics, North-Holland, Amsterdam, (edited volume).
- Victor Fuchs (1982), Economic Aspects of Health, The University of Chicago Press, Chicago (edited volume)
- Tim Ensor and Sophie Witter (2001), Health economics in low income countries: adapting to the reality of the unofficial economy, Health Policy, Vol. 57, pp. 1-13.

# A-15: ACCOUNTANCY AND FINANCIAL STATEMENT ANALYSIS

**Objectives:** The course aims at providing basic understanding of various essential concepts of accountancy and preparation of accounting statements, introduction to accounting standards and IFRS framework of accounting.

#### **Contents**

## **Module 1: Basic Principles**

Financial Accounting & Accounting Standards- Accounting Equations – Users of Accounting Statements, Importance – Objectives and Principles – Accounting Concepts and Conventions – Principle of Double Entry Book Keeping, Trends in Accounting principles, GAAP, IFRS, IAS

# **Module 2: The Accounting Process**

Preparation of Books of Original Records: Journals – Subsidiary Book – Problems on Cash Book and Petty Cash Book – Ledgers & Trial Balance – Classification of Capital and Revenue Expenses – Final Accounts with Adjustments.

# Module 3: Preparation of Final Accounts/Statement

Sole traders with Basic Adjustments – Preparation of Final Accounts / Statement of Companies (Both Horizontal & Vertical Form of Financial Statements) – Brief Introduction to Partnership Account- Accounting for small, medium and large companies

#### **Module 4: Statement of Changes in Funds**

Funds Flow Statement – Cash Flow Statement – Problems with Basic Adjustment on FFS & CFS – Statement of Changes in Working Capital – Funds from Operations – Paid Cost and Unpaid Costs – Distinction Between Cash Profits and Book Profits – Preparation and Analysis of Cash Flow Statement and Funds Flow Statement.

#### **Module 5: Depreciation & Inventory Valuation**

Concepts & Methods of Depreciation – Problems on Straight Line & WDV Methods – Inventory – Concepts & Methods – Problems on LIFO, FIFO & Weighted Average – Valuation of Fixed Assets- Current and Non -current assets and liabilities— Tangible v/s Intangible assets – Depreciation of Fixed Assets and Methods of Depreciation – Inventory Valuation: Methods of Inventory Valuation and Valuation Of Goodwill – Methods of Valuation of Goodwill.

# Module 6: Analysis of Companies' Annual Reports

Provisions of the Companies Act 1956 – Provision Affecting Preparation – Presentation & Analysis of Audit Reports & Directors' Reports.

# Module 7: Financial Analysis of Financial Performance of a Firm

Different Tools – Ratio Analysis – Different Types of Ratio's – Inter-Relation Between Ratio's – Due-point Analysis – Common Size Statement of Inter Firm and Intra Firm – Internal Revenue Code-Interpretation of Financial Statements From Investor and Company Point of View – Horizontal Analysis and Vertical Analysis of Company Financial Statements – Liquidity, Leverage, Solvency and Profitability Ratios – Du Pont Chart – A Case Study on Ratio Analysis

# **Reading List:**

- Ghosh, T.P., (2010), *Understanding IFRS*, Taxmann.
- D'Souza, Dolphy, (2009), Indian Accounting Standards and GAAP In 2 Vol., Snow White Publications Pvt. Ltd.
- International Accounting Standards Board (2007), International Financial Reporting Standards 2007 (including International Accounting Standards (IAS(tm)) and Interpretations as at 1 January 2007), LexisNexis, ISBN 1-4224-1813-8.
- Case studies of IFRS implementation in Brazil, Germany, India, Jamaica, Kenya, Pakistan, South Africa and Turkey, United Nations Intergovernmental Working Group on International Standards of Accounting and Reporting (ISAR). (Various years)
- Catty, James P. (2010), Wiley Guide to Fair Value, Under IFRS [6], ISBN: 0470477083, John Wiley & Sons.

# **A-16: FINANCIAL ECONOMICS**

#### **PREAMBLE**

The course on Financial Economics is designed with 3 objectives in mind. Firstly, to familiarize students with the financial system and its components viz. financial instruments, financial institutions, financial markets and financial regulations. Secondly, to familiarize them with contemporary theories about the workings of different financial markets including money market, capital markets (bonds, stocks and hybrids) and derivative markets. Thirdly, familiarize them with the policy and regulatory framework within which financial institutions are required to function.

# Module 1: The demand for securities

The time dimension – Present value and duration – The calculation of yields on zero-coupon bonds – The term structure of interest rates – The risk dimension – Measurement of risk. Bivariate distributions–Conditional probabilities and expected values – Estimating the mean and variance of returns – Expected utility.

#### Module 2: The supply of securities

Regulations governing supply of securities – General characteristics of securities – Government bonds – Index linked bonds – Corporate Securities – equities, bonds, convertible securities –Stock market operations – Money market funds – Claims on financial institutions.

# Module 3: Securities markets and their efficiency

Stock exchanges – The over the counter stock market – Operational efficiency and the Efficient Market Hypothesis(EMH) – The weak, semi-strong and the strong form of EMH.

# Module 4: The determination of equity prices

Shares as claims on future dividends and on corporate net worth – The Capital Asset Pricing Model (CAPM) – The simplest form – Estimating betas- Implications for portfolio management – Validity of CAPM – Arbitrage Pricing theory. An alternative approach – Stock indices – Bombay Sensitive Index, Bombay National Index, Dow Jones Industrial Index(DJI), New York Stock exchange composite index(NYSE).

# Module 5: Security analysis and market efficiency

A modern view of security analysis – Macroeconomic developments and securities markets—Performance of securities markets – Industry growth, structure and firm specific factors- Uses and pitfalls of Price / Earnings ratios.

# **Module 6: Derivatives**

Uses of Derivatives – Futures contracts and futures markets – Forward contracts – The origins of Futures trading – Basic elements and organization of futures contracts.

# **Module 7: Futures prices**

Relation among spot and futures – financial futures – commodity futures – Closing out with futures – Hedgers, speculators, market equilibrium – The role of expectations – Futures and portfolio management.

# Module 8: Options and option pricing

Institutional aspects – Exchange traded stock options – The pa offs from buying and selling options – Boundary conditions on option prices – The put-call parity theorem – The Black-Scholes formula – Other option models.

# Module 9: Swaps, Currency and Interest Rate Swaps

Vanilla Interest Rate Swaps – Swaptions – Other types of swaps – Currency, Equity and Commodity Swaps.

# Module 10: Regulation of financial markets

The ethics of finance and the economic function of financial markets – The purpose of regulation – levels of regulation – Securities Contract Regulation Act – Securities and Exchange Board of India (SEBI).

#### **BASIC READING LIST**

- Chandra, Prasanna (2008), Investment Analysis and Portfolio Management, Tata McGraw Hills
- Shapiro, Alan C. (1999), 4<sup>th</sup> edition, Multinational Financial Management, International McGraw Hills, , Prentice-Hall of India
- John Y. Campbell, Andrew W.Lo and A. Graig Mackinlay, (1997) The Econometrics of Financial Markets, Princeton University Press,

#### ADDITIONAL READING LIST

#### Module 1, 2 & 3

- Houthakkar H.S. and Williamson P.J. (1996), The Economics of Financial Markets, Oxford University Press
- Jurgen Echberger and Ian R. Harper (1997), Financial Economics, Oxford University Press

## Module 2:

 Ross Stephan A. and Rudolph W. Westerfield (1998), Fundamentals of Corporate Finance, McGraw Hill International edition

#### Module 3 & 4:

Fabozzi (2009), Bond Markets, 7th revised edition, Pearson Publications, USA, February 27

#### Module 3:

- Basu, S., (1977), "The Investment Performance of Common Stocks in Relation to their Price to Earnings Ratios: A Test of the Efficient Market Hypothesis", Journal of Finance, 32, pp. 663-682
- Fama E.F. (1970), "Efficient Capital Markets: A Review of Theory and Empirical Work", Journal of Finance, 25 May, pp. 383-417
- Fama, E.F. (1991), "Efficient Capital Markets II", Journal of Finance, 46, (December), pp. 1575-617

#### Module 4:

- Graves, Affleck, Hegde, J.S. and Miller, R. (1994), "Trading Mechanisms and the Components of the Bid Ask Spread", Journal of Finance, 44, pp. 1471-1488.
- Barsky, R. and Long, J. De (1993), "Why Does the Stock Market Fluctuate?", Quarterly Journal of Economics, 108, pp. 291-311
- Black, F., Jensen, M.C. and Scholes, M.A. (1972), "The Capital Asset Pricing Model: Some Empirical Tests", in M.C. Jensen (ed.), Studies in the Theory of Capital Markets, (Praeger, New York)
- Fama E.F. and J. MacBeth, (1973), "Risk, Return and Equilibrium Empirical Tests", Journal of Political Economy, 71, pp. 607-636
- Ross, S.A. (1976), "Arbitrage Theory of Capital Asset Pricing", Journal of Economic Theory, 13, pp. 341-60

#### Module 5:

- Markowitz, H. (1952), "Portfolio Selection," Journal of Finance, 7: 77-91.
- Merton, R. (1980), "On Estimating the Expected Return on the Market: An Exploratory Investigation", Journal of Financial Economics, 8, pp. 323-361.

# Module 6, 7, 8, 9:

- King, David N. (1999), Financial Claims and Derivatives, International Thomson Business Press.
- Hull John (1998), Future Options and Other Derivative Securities, 3rd edition, Prentice Hall International / Hua Xia Publishing House.

#### Module 7:

 Dusak, K. (1973), "Futures Trading and Investor Returns: An Investigation of Commodity Market Risk Premiums", Journal of Political Economy, 87, (Nov./Dec.), 1387-1406

# Module 8:

- Simon Benninga (1997), Financial Modeling, MIT Press
- Black, I. and Scholes, M. (1973), "The Pricing of Options and Corporate Liabilities", Journal of Political Economy, 81, 637-59

# Module 10:

• Krishan, Bal and Narta, S. S. (1998), Security Markets in India, Kanishka Publishers, New Delhi.

#### ADDITIONAL READING LIST:

- (Basel: BIS, April 1986) "Bank for International Settlements", Recent Innovations in International Banking.
- Benjamin M. Friedman H. Hahn (1990) "A formal treatment of the requirements for targets" is available in Benjamin M. Friedman, "Targets and Instruments of Monetary Policy," chapter 22 in Benjamin M. Friedman H. Hahn, handbook of Monetary Economics, (Amsterdam: North-Holland, 1990).
- Blume, Marshall, E. (June 1975) "Betas and Their Regression Tendencies," Journal of Finance, 30, 785-96.
- Cox. Ingersoll, and Ross, "A Re-examination of Traditional Hypothesis," pp. 774-775.
- Culbertson, J.M. (November 1957) "The Term Structure of Interest Rates," Quarterly Journal of Economics, pp. 489-504.
- Daniel C. Inro, Christine X. Jaing, Michael Y. Ho, Wayne Y. Lee (May/June 1999) "Mutual Fund Performance: Does Fund Size Matter?" Financial Analysis Journal, pp. 74-87.
- Edward S. O'Neal (September/October 1999) "Mutual Fund Share Classes and Broker Incentives," Financial Analysis Journal, pp. 76-87.
- Eugene F. Fama (1976) "Forward Rates as Predictors of Future Spot Rates," Journal of Financial Economics, 3, no.4, pp. 361-377.
- Fama (December 1991) "Efficient Capital Markets II," Journal of Finance, 46, 1575-615.
- Fama (December 1998) "Value Growth: The International Evidence," Journal of Finance, 53, 1975-99.
- Fama, Eugene, F. (May 1970) "Efficient Capital Market: A Review of Theory and Empirical Work," Journal of Finance, 25, 383-417.
- Fisher Black and Myron Scholes (May-June 1937) "The Pricing of Corporate Liabilities," Journal of Political Economy, pp. 637-659.
- George, J. Benston (March 1973) "Required Disclosure and the Stock Market: An Evaluation of the Security Exchange Act
  of 1934," American Economic Review, pp. 132-155.
- Harry K. Markowitz, (March 1952) "Portfolio Selection," Journal of Finance, pp. 71-91 and Portfolio Selection: Efficient
  Diversification of Investments (New York: John Wiley & Sons, Inc., 1959).
- Irving Fisher (1930) "The Theory of Interest Rates" (New York; Macmillan, 1930)
- John C. Cox, Stephen A. Ross, and Mark Rubinstein (September 1979) "Option Pricing: A Simplified Approach," *Journal of Financial Economics*, pp. 229-263.
- Jonathan Ingersoll, Jr., and Stephen Ross (September 1981) These formulations are summarized by Jonathan Ingersoll, Jr., and Stephen Ross. "A Re-examination of Traditional Hypothesis About the Term Structure of Interest Rates," *Journal of Finance* (September 1981), pp. 769-799.
- Keynes, J.M. (1936) "The General Theory of Employment, Interest and Money" (New York: Harcourt, Brace & World, 1936)
- Lucas Papademos and Franco Modigliani (1990) "The Supply of Money and the Control of National Income," chapter 10 in Benjamin M. Friedman and Frank H. Hahn (eds.) Handbook of Monetary Economics (Amsterdam; North-Holland, Elsevier, 1990), pp. 428-430.
- Lutz, F. (1940-41) "The Structure of Interest Rates," Quarterly Journal of Economics, pp. 36-63.
- Marshall E. Blume (April 1970) "Portfolio Theory: A Step Toward Its Practical Application," Journal of Business, pp. 152-173
- Marshall E. Blume and Irwin Friend (March 1973) "A New Look at the Capital Asset Pricing Model," Journal of Finance (March 1973), pp. 19-33; and Eugene F. Fama and James D. MacBeth, "Risk, Return and Equilibrium: Empirical Tests," Working Paper No. 7237, University of Chicago, Graduate School of Business, August 1972.
- Merton, H. Miller (December 1986) "Financial Innovation: The Last Twenty Years and the Next," Journal of Financial and Quantitative Analysis, pp. 459-471.
- Merton H. Miller and Myron S. Scholes (1972) "Rates of Returns in Relation to Risk: A Reexamination of Recent Findings,"
  and Fischer Black, Michael C. Jensen, and Myron S. Scholes, "The Capital Assets Pricing Model: Some Empirical Evidence,"
  in Michael C. Jensen (ed.), Studies in the Theory of Capital Markets (New York: Praeger Books, 1971)
- Modigliani, Franco, and Miller, M.H. (June 1958) "The Cost of Capital, Corporation Finance and the Theory of Investment," American Economic Review, 48, 261-97.
- Richard J. Rendleman and Brit J. Bartter (December 1979) "Two State Option Pricing," Journal of Finance, pp. 1093-1110.
- Richard Roll (March 1997) "A Critique of the Asset Pricing Theory: Part I. On the Past and Potential Testability of the Theory," Journal of Financial Economics, pp. 139-176.
- Stephen A. Ross (December 1976) "The Arbitrage Theory of Capital Assets Pricing," Journal of Economic Theory, pp. 343-362.
- Stephen, A. Ross (July 1989) "Institutional Markets, Financial Marketing, and Financial Innovation," Journal of Finance, p.
- Stephen A. Ross (March 1980) "Options and Efficiency," Quarterly Journal of Economics (February 1976), pp. 75-89; and
  Fred Arditti and Kose John, "Spanning the State Space with Options," Journal of Financial and Quantitative Analysis, pp. 19.
- William F. Sharpe (September 1964) "Capital Assets Prices: A Theory of Market Equilibrium Under Conditions of Risk," Journal of Finance, pp. 425-442.
- William F. Sharpe (1981) Investments, (Englewood Cliffs, N.J.: Prentice Hall, 1981), Chapter 16

# **ADDITIONAL REFERENCES:**

- All India Management Association, Global Trends in Finance: Opportunities for India, Excel Books, New Delhi, 1998.
- Damodaran, Aswath (1997), Corporate Finance, Theory and Practice, John Wiley and Sons, (Chap. 27, Option Pricing Theory).
- Babbel David F., Andenas M. and Santomoro Anthony (Eds.) (1998), Financial Markets, Instruments and Institutions, Irwin/McGraw Hill, Singapore
- Huang, C. And Litzenberger, R., (1988). Foundations for Financial Economics, New York, North-Holland.
- Bingham N.H. and Kiesel Rudiger (1998), Risk-neutral Valuation: Pricing and Hedging of Financial Derivatives, 2<sup>nd</sup> edition,
   Springer-Verlag, London
- Pike, Richard and Neele, Bill (1998), Corporate Finance and Investment Decisions and Strategies, Prentice Hall of India
- Somanathan T.V. (1998), Derivatives
- Tushar Waghmare (ed.) (1998), Future of India's Stock Markets, Tata McGraw Hill, New Delhi

# **B-01: INDIAN AGRICULTURAL ECONOMICS**

**PREAMBLE:** The objective of this course is to provide a detailed treatment of issues in agricultural economics to those intending to specialize in this area. Its objective is to familiarize students with policy issues that are relevant to Indian agricultural economics and enable them to analyze the issues, using basic micro-economic concepts.

#### Module 1:

Growth of agricultural production and income in India during pre and post-independence period. Comparison of India with other countries. Types of Production Functions – Estimation procedures and interpreting the results of production functions. Total Factor Productivity – concept and measurement.

# Module 2: Irrigation and its development over the years

Irrigation and expansion of cultivation. Changing importance of sources of irrigation. Water saving technologies. The economics of surface and other irrigation development and use of water.

#### Module 3:

New technology (seeds, fertilizers and pesticides) including GM crops in agriculture. The economic logic of change in it. The performance, problems and prospects of technological change in Indian agriculture, including the experience of other countries.

## Module 4:

Patterns of cropping in different regions. Economic logic of cropping pattern. Shift in cropping pattern and its implications on food security.

#### Module 6:

Farm capital structure in agriculture and its changes. Issues on capital formation in Indian agriculture. Issues on the mechanization of agriculture. Rural infrastructure and agricultural development nexus.

# Module 7:

Employment and unemployment in agriculture and its measurement. Agricultural wages in India.

# Module 8: Institutional settings of Indian agriculture

Organization of agricultural economy, land ownership pattern, brief accounts of land tenures and changes in it. The economic logic of tenancy in agriculture, types of tenancy and tenancy reform. Ceiling on land holdings. The size-productivity relation in Indian agriculture. Special problems of small and marginal farmers and measures to tackle the same. Experience of other countries on tenancy reforms.

# Module 9: Credit in Indian agriculture

Purposes of loans, sources of finance and changes in theses over the plan period. Factors determining demand for credit. Recent policy changes in regard to farm credit and their implications.

# Module 10: Marketing

Characteristics of primary agricultural markets in India. Regulated markets and market intervention. The integration of different markets in India and the structure of marketing agencies.

# Module 11:

Farm prices: regional and seasonal variations. Trends in relative prices of farm products. Terms of Trade. Supply response to prices in agriculture. Behavior of marketed surplus. Demand for farm products in India. Estimation of demand function. Price policy in India and its basis. Cost concepts. The question of parity price, forward price and cost of production as a basis of price policy.

#### Module 12:

Income distribution in Indian agriculture. Subsidies. Poverty in rural India. Taxation of agriculture.

## Module 13:

Overview of approach to agricultural development, with reference to international experience. Agricultural exports and imports. WTO and Indian Agriculture.

#### READING LIST

#### Module 1:

- Ghatak R, S. and Ingersent, K. (1984), Agriculture and Economic Development, Harvester Press, Ch's 3 and 5.
- Deshpande, R.S., Performance of Indian Agriculture through Plan Periods
- Malik , Jayanta Kumar (1997), Growth of Agriculture in Independent India: 50 Years and After, RBI Occasional Papers, Vol. 18, Nos. 2 & 3, Special Issue (June & Sept.), pp. 145-172
- Bhalla, G.S. and Singh Gurmail (2001), Indian Agriculture: Four Decades of Development, Sage Publications, N. Delhi.
- Prahladachar, M. (1983), Income Distribution of the Green Revolution in India: A Review of Empirical Evidence, World Development, Vol. 11, No. 11, pp. 927-44, Nov.
- Sankhayan P.L. (1998), Introduction to the Economics of Agricultural Production, Prentice Hall of India Private Limited, New Delhi

#### Module 5:

- Dhawan, B.D. and Yadav, S.S. (1995), Private Fixed Capital Formation in Agriculture: Some Aspects of Farmer's Investment Behavior, Economic and Political Weekly, Vol. 30, No. 39, Sep. 30, pp. A103-A109
- Rath, N. (1989), Agricultural Growth and Investment in India, Journal of Indian School of Political Economy, Vol. 1, No. 1, January-June
- Dhawan, B.D. (1998), Studies in Agricultural Investments and Rural Savings, Commonwealth Publications, New Delhi.
- Chand, Ramesh (2001), Emerging Trends and Issues in Public and Private Investments in Indian Agriculture: A Statewise Analysis, Indian Journal of Agricultural Economics, Apr-June, Vol. 56, No. 2, pp. 161-184

#### Module 6:

- Acharya, S. and. Papanek, G. F (1989), Agricultural Wages and Poverty in India: A Model of Rural Labor Markets, Discussion Paper 39, Centre for Asian Development Studies, Boston University, Boston
- Jose, A.V. (1988), Agricultural Wages in India, Economic and Political Weekly, 25<sup>th</sup> June, Vol. 23, No. 26, pp. A46-A51+A53-A58

# Module 9:

- Acharya, S. S. and Agarwal N. L. (1999), 3<sup>rd</sup> edition, Agricultural Marketing in India, Oxford and IBH Pub. Co. Pvt. Ltd., New Delhi.
- Jharwal, S. M. (1998), 1st edition, Public Distribution System in India, Manak Publications, India.
- Kahlon, A.S. and George M.V. (1986), Agricultural Marketing and Price Policies, August, South Asia Books.
- Gulati, Ashok and Sharma P.K. (1991), Government Intervention in Agricultural Markets, Journal of Indian School of Political Economy, Vol. 3, No.2, April-June, pp. 205-237
- Memoria, C.B. and Joshi R.L. (2005), Principles and Practices of Marketing in India, Kitab Mehta, Delhi.

# Module 10:

- Acharya, S.S. (1997), "Agricultural Price Policy and Development: Some Facts and Emerging Issues, Indian Journal of Agricultural Economics, Jan-Mar, Vol. 52, No.1, pp. 40-47
- Acharya, S.S. and Agarwal N. L. (1999), 3<sup>rd</sup> edition, Agricultural Marketing in India, Oxford and IBH Pub. Co. Pvt. Ltd., New Delhi.
- Bhalla, G. S. and Singh G. (2001), Indian Agriculture: Four Decades of Development, Sage Publications, New Delhi.
- Bhalla, G.S. and Hazell, P. (1999) Prospects for India's Cereal Supply and Demand to 2020, Discussion Paper 29, International Food Policy Research Institute, Washington, D.C., USA.
- Deshpande, R. S. (1996), "Demand and Supply of Agricultural Commodities A Review", Indian Journal of Agricultural Economics, Vol. 51, No. 1 & 2, Jan-June, pp. 270-287
- Gulati, A and Sharma P.K. (1991) Government Intervention in Agricultural Markets, Journal of Indian School of Political Economy, Vol. 3, No.2, Apr-June
- Janvry, A. and Subbarao K. (1986), Agricultural Price Policy: the Debate and the Issues (Chapter 2), Oxford University Press, New Delhi.
- Kahlon, A.S. and Tyagi D.S. (1989), 2<sup>nd</sup> Edition, Agricultural Price Policy in India, Allied Publishers Limited.

# Module 12:

- Bhalla, G.S. (1994), Economic Liberalisation and Indian Agriculture, EPW, Aug. 20
- Gulati, A. and Bhide S. (1993), Structural Adjustment and Agriculture, Working Paper No. 44, NCAER, New Delhi.
- Josling, Timothy (1998), Agricultural Trade Policy: Completing the Reform, Institute for International Economics, Washington, D.C., USA.
- Datta, S. K. and Chakravarti, M. (2001), Reforming Agriculture in the WTO Environment, in Dutta and Deodhar (eds.), Implications of WTO Agreements for Indian Agriculture, Oxford and IBH Publishing Company, New Delhi
- Deodhar, Satish (2001), WTO Agreements on Indian Agriculture: Retrospection and Prospects, in Dutta and Deodhar (eds.),
   Implications of WTO Agreements for Indian Agriculture, Oxford and IBH Publishing Company, New Delhi

# **B-02: TRANSPORT ECONOMICS**

### **PREAMBLE**

# Module 1: Development Objectives and the Role of Transportation

The Transport function – Requirements of transport in the development context – Relationship between transportation and economic growth – Effects of an improved transportation system – Characteristics of the transportation system: technological characteristics – Design of the transport sector: choice of transport technology and impact of innovations.

# Module 2: Theoretical Analysis of the Location of Economic Activities

Concept of economic space – Location theory: structure of transport costs, concept of market areas, concentration and dispersion of industry – The urban and regional spatial structure – Principles of Transport planning: distinctive features of transport planning – deriving an optimal plan – The systems approach to transport planning: macro planning.

# Module 3: Application of Economic Theory to Transportation

Analysis of demand – Demand studies – Passenger demand models: trip generation and attraction models – Trip distribution models: the gravity model formulation and others: modal split models and network assignment formulations – Passenger demand models – The demand for freight services: extension of passenger demand models to analyze freight demand: optimization and behavioral models in freight transportation – Analysis of supply: concept and importance of user cost: defining a supply function in the context of transportation services – Equilibrium in networks: Network analysis – Principles of pricing in transport: Transport as a utility-pricing on the basis of costs: theoretical considerations of costs – Identification of costs- problem of joint and common costs – Average cost versus marginal cost pricing – long run marginal versus short run marginal cost pricing – Value of service principle in pricing: price discrimination – rail tariffs – Road pricing: two-part tariff and congestion pricing.

# Module 4: Theory and Application of Decision Making Principles and Evaluation of Large-scale Transport Projects

Cost-benefit analysis in transport investment-measurement of economic costs and benefits: choice of a discount rate: some practical problems of investment evaluation – Some case studies.

# **Module 5: Transport and Energy**

Efficient energy modes – Transport and the environment: External effects and the social costs of transportation: efficiency and equity, Transport and environmental sustainability.

# **Module 6: Role of Public Policy**

Scope of Government transport policy – Rationale of intervention: historical perspective – Control on quality and quantity of services – Policy aimed at efficiency and better allocation of resources – Towards an efficient and socially feasible regulation of transport – Objectives of Transport policy in India: A review of transport development under the plans – Operational and financial performance of the Railways – Highway transport performance – Alternative modes of transport: water and air transport – Problem of coordination, privatization as a policy measure.

### BASIC READING LIST

- National Council of Applied Economic Research, Indian Shipping Industry: Retrospect & Prospect
- Infrastructure Development Finance Company, Indian Institute of Management, Indian Infrastructure Report (2001, 2002 & 2003), Ahmedabad
- Stubbs, Tyson & Dalvi, Transport Economics
- Verma, K.B., Indian Railway Finance
- Mohan, Rakesh (2001), Indian Railways Report, Vol. 1, Vol. 2 (Part 1 & 2)
- Mohan, Rakesh (1996), The India's Infrastructure Report
- Alonso, William, "Location, Land and Use: Towards a General Theory of Land Rent"
- Pickering, D., Park J. M and Bannister, D. H, Utility Mapping & Record Keeping for Infrastructure
- Davey, Kenneth J., Elements of Urban Management
- Stuart, Chapel, Urban Growth Dynamic in a Regional Cluster of Cities
- · Kozlowski, J., Threshold Analysis: Quantitative Planning Methods
- Rebelo, George, M, Reforming the Urban Transport Sector in The Rio De Janeiro Metropolitan Region
- World Bank, Sustainable Transport
- Pouliquen, Louisy, Rural Infrastructure from a World Bank Perspective
- World Bank, World Development Report- 1995
- World Commission on Environment and Development, Our Common Future
- Oxford, India Infrastructure Report 2001 & 2002
- Kneafsey, James T., The Economics of the Transportation Firm
- Sengupta, Ramprasad, Sustainable Transport Pricing in India
- Bruton, Michael J., Introduction to Transportation Planning
- Button, K.J. & Gillingwater D. Ed., Transport, Location & Spatial Policy
- Hensher, David A., Urban Transport Economics
- Wilfred, Owen, Distance & Development
- Foster, C.D., The Transport Problem
- Saxena, R.N, Indian Railways: Financial & Commercial Profile

# **B-03: INDUSTRY: ORGANIZATION, STRUCTURE, AND PROBLEMS**

### **PREAMBLE**

This course will first critically examine the industrial scenario in India and discuss debates involved in the industrial development of India. Next, it will study what determines market structure and how firms may be able to act strategically, in choosing their prices, products or advertising, to affect market structure and market outcomes. The course will be a mixture of theory and empirics. The course will jump from one to the other so that the empirical sections will complement the theory sections and vice versa.

#### Module 1

Assessments of the changes in structure of industries – Growth of corporate sector/non-corporate sector, large/small/household – public/private – appraisal of policies that facilitated – implications and consequences.

### Module 2

Constraints on growth – shortages of raw material, lack of demand, shortage of capital, inadequate infrastructure.

#### Module 3

Regional disparities – measure for dispersal – inadequate contribution of large/capital intensive enterprises to regional spread – promotional and public financial institutional support – consequences of liberal credit and finance – emphasis on capital-intensive enterprises.

### Module 4

Growth of small scale and household sector – role in Indian economy – problems like demand constraints – linkage with large and medium.

#### Module 5

Strategic interaction – full Information and incomplete information

# Module 6: Market structure & models of market entry

What are the welfare effects of more firms? What determines the degree of product differentiation? Is it optimal? How does the number of firms change as market size increases? Why do we see firms of different sizes? Some facts on entry and exit. Static (2- period) Entry games with firms, which are non-explicitly differentiated. Dynamic entry games. Entry models with explicit product differentiation.

# Module 7

Empirical analysis of price discrimination and non-linear pricing.

# **Module 8: Mergers and Antitrust**

Horizontal mergers – Horizontal mergers with homogeneous goods, differentiated goods mergers. Vertical restraints. Incomplete contracts and the boundaries of the firm.

# Module 9: Research and development and adoption of new technologies

Patents and R&D incentives, network effects and technology adoption.

### Module 10: Advertising

Views on advertising: persuasive view, informative view, and complementary view. Empirical regularities: direct effects of advertising and the indirect effects of advertising. Monopoly advertising. Advertising and price. Advertising and quality. Advertising and entry deterrence. Empirical analyses: advertising and firm conduct.

# Module 11: Regulations

Theories of regulations. The regulation of entry – Competition Act, 2002, India – Effects of privatization and competitive pressure on firms' price cost margins – Impact of liberalization on market disciplines and productivity growth – Business environment and firm entry – Puzzel of jobless growth in Indian manufacturing – Impact of labour regulation on industrial performance.

### BASIC READING LIST:

#### Books:

- Mookherjee, D. (1997). Indian Industry: Policies and Performance. Oxford University Press, Edited.
- Jean Tirole: The Theory of Industrial Organization, (MIT Press) Prentice Hall India.
- Oz Shy: Industrial Organization, MIT Press.
- Stephen Martin: Advanced Industrial Economics, Blackwell.
- Kaushik Basu: Lectures in Industrial Organization Theory, Blackwell.
- Richard Schmalensee and Robert D. Willig (Ed:), Hand Book of Industrial Organization, Volume I and II, North Holland.
- Donald A. Hay and Derek J. Morris: Industrial economics and organization; theory and evidence, Oxford University Press.

# Papers:

- J. Bulow, J. Geanakoplos and P. Klemperer, "Multimarket Oligopoly: Strategic Substitutes and Complements", Journal of Political Economy, 1985, 488-511.
- A. Dixit, "The Role of Investment in Entry Deterrence", Economic Journal, 1980, 721-9.
- David M. Kreps; Jose A. Scheinkman, "Quantity Precommitment and Bertrand Competition Yield Cournot Outcomes", *The Bell Journal of Economics*, 1983, Vol. 14, No. 2., pp. 326-337.
- Chaim Fershtman; Kenneth L. Judd, "Equilibrium Incentives in Oligopoly", The American Economic Review, 1987, Vol. 77, No. 5., pp. 927-940.
- K. Judd, "Credible Spatial Preemption, Rand Journal of Economics, 1985, 16, 153-166.
- L. Dafny, "Entry Deterrence in Hospital Procedure Markets: A Simple Model of Learning-By-Doing", 2003, NBER 9871.
- R. Smiley, "Empirical Evidence on Strategic Entry Deterrence", International Journal of Industrial Organization, 1988, 6, 167-180
- P. Milgrom and J. Roberts, "Limit Pricing and Entry Under Incomplete Information: An Equilibrium Analysis", Econometrica, 1982, 50, pp. 443-460.
- P. Milgrom and J. Roberts, "Predation, Reputation, and Entry Deterrence", Journal of Economic Theory, 1982, 27, 288-312.
- N.G. Mankiw and M.D. Whinston, "Free Entry and Social Inefficiency", Rand Journal of Economics, 1986, 48-58.
- Ghosh and S. Saha, "Excess entry in the absence of scale economies", Economic Theory, 2007 30: 575–586
- S. Anderson, A. de Palma, and Y. Nesterov, "Oligopolistic Competition and the Optimal Provision of Products", Econometrica, 1995, Vol. 63, No. 6, pp. 1281-1302,
- A. Dixit and J. Stiglitz, "Monopolistic Competition and Optimal Product Diversity", American Economic Review, 1977, 297-308.
- J. Sutton, "One Smart Agent", Rand Journal of Economics, 1997, 605-628.
- T. Bresnahan, "Sutton's Sunk Costs and Market Structure: Price Competition, Advertising, and the Evolution of Concentration: Review Article", Rand Journal of Economics, 1992, 23(1), 137-52.
- J. Sutton, "Gibrat's Legacy", Journal of Economic Literature, 1992, 35(1), 40-59.
- H. Simon and C. Bonini, "The Size Distribution of Business Firms", American Economic Review, 1958, 48(4), 607-17
- B. Jovanovic, "Selection and the Evolution of Industry," Econometrica, 1982, 649-670.
- T. Dunne, M. Roberts and L. Samuelson, "Patterns of Firm Entry and Exit in US Manufacturing", Rand Journal of Economics, 1988, 495-515.
- S. Klepper, "Entry, Exit, Growth and Innovation over the Product Life Cycle", American Economic Review, 1996, 86(3), 562-583.
- S. Berry and J. Waldfogel, "Free Entry and Social Inefficiency in Radio Broadcasting" Rand Journal of Economics, 1999, 30, 397-420.
- T. Bresnahan and P. Reiss, "Entry in Monopoly Markets", Review of Economic Studies, 1990, 531-53.
- T. Bresnahan and P. Reiss, "Entry and Competition in Concentrated Markets", Journal of Political Economy, 1991, 99, pp. 977-1009.
- M. Whinston and S. Collins. 1993. "Entry and Competitive Structure in Deregulated Airline Markets: An Event Study Analysis
  of People Express", 1993, 23, 445-62.
- R. Ericson and A. Pakes, "Markov-Perfect Industry Dynamics: A Framework for Empirical Work", Review of Economic Studies, 1995, Vol. 62, No. 1, 53-82.
- S. Borenstein and J. Netz, "Why Do All the Flights Leave at 8 a.m.? Competition and Departure- Time Differentiation in Airline Markets," *International Journal of Industrial Organization*, 1999, 611-640
- Borenstein and Rose (1994) Competition and Price Dispersion in the US Airline Industry, Joutrnal of Political Economy 653-683
- Shepard, "Price Discrimination and Retail Configuration", Journal of Political Economy, 1991, 99(1), 30-51
- Willig, R.D. "Merger Analysis, Industrial Organization Theory, and Merger Guidelines", 1991, Brookings Papers on Economic Activity: Microeconomics, 281-332.
- Farrell, J. and C. Shapiro "Horizontal Mergers: An Equilibrium Analysis", American Economic Review, 1990, 80(1), 107-126
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# **B-04: LINEAR ECONOMICS**

### **PREAMBLE**

This course exposes students to developments in economic theory that have been inspired by classical economics, particularly by the theories of Adam Smith, David Ricardo and Karl Marx. The course is divided into four parts. After the introductory mathematics, required exposition will be made of the fallacies in the neo-classical theories of value and distribution. The several parts cover input-output models and their empirical applications. The third part is devoted to a reconstruction and revival of classical economics as represented by the Sraffa system and its development. The final part cover under the general theory of multi-country multi-commodity trade as formulated by Graham and developed by McKenzie and Jones

### Module 1:

Critique of Marginal Productivity Theory, Simon's critique of neo-classical production functions. Alternative Thories of Distribution

### **Module 2: Matrix Algebra:**

Elements of Matrix Algebra - Addition, Multiplication, Inverse. The notation of rank of a Matrix. Solution of non-homogenous and homogenous systems of equations. Characteristic roots and characteristic vectors of square matrices – Perron. Frobenius theorem for Semi-Positive matrices (without proof).

## **Module 3: Input-Output Analysis:**

Static Input-output system - assumptions - Technology matrix - viability Technology; Hawkins-Simon Conditions - open and closed models - Determination of output levels given final demand - Elements of Input - output systems. Dynamic Input-Output Model. Input-output tables in India - a brief review; problems in the construction of Input-output tables - Sectorial classification - Producer Purchase Prices - Data Base. Input-output tables and Projection - Validity of the assumption of constancy of Input-output coefficients - Upgrading the Input-output tables RAS method.

# Module 4: The Sraffa Systems:

Connection between income distribution and prices. The standard commodity Reduction to Dated Labour and the measurement of capital. Comparison of the Sraffa, Leontief and Von Neumann Models.

Module 5: Closure for the Sraffa System: Alternative General Equilibrium Theory.

Module 6: Multi-country Multi-commodity Trade Theory. Graham-McKenzie Model

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### **BASIC READING LIST**

# Module 2:

- Hadley, G(1961), Linear algebra, Addision-Wesley Massachusetts
- Namboddiri, Krishnan (1984), Matrix algebra: An introduction, Sage publication, Volume -38
- Lipachutz, Seymour, Linear Algebra ,Third Edition, Schaum Outlines Series
- Shanti, Narayan, Lipson Marc (2002), A text book of matrices, Schaum Outlines Series.
- Bellman, Richard (1970), Introduction to matrix analysis, 2nd edition, McGraw-Hill, New York, NY.
- Mills, Gardon (1970) Introduction to linear Algebra, Aldine Pub. Co. (Chicago).

# Module 3:

- Mathur, P.N. & Bharadwaj, R (1968), Economic Analysis in Input Output Framework with Indian Empirical Explorations, Vol.
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- Dorfman R., Samuelsons P., Solow R. (1958), Linear programming & economic analysis, McGraw-Hill New York.
- Saluja M.R. (1981), Input-output tables for India, John Wiley & Sons (Asia) Pte Ltd.

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- Mathur & Venkatramaaiah(1969), Economic analysis in input and output framework, Vol. II, Input Output Research
  Association.
- Kundu, A.(1976), Input-output framework and economic analysis, (1st edition) K. B. Publications, New Delhi
- Leontief (1986), Input-output economics (2<sup>nd</sup> edition), Oxford University Press
- Leontief, W.W., Structure of American economy 1919-1939 (third edition), Oxford University Press, New York.
- Brody, Andras (1970), Proportions, prices and planning North-Holland Pub. Co.Budapest, Amsterdam
- · Carter & Brody (1972), Applications of Input-output analysis, North Holland/Elsevier, Amsterdam
- United Nations, Input-output and analysis
- Bulmer, Thomas (1982), Input-output analysis in Developing countries, (2<sup>nd</sup> edition) John Wiley & Sons Ltd. pp. XI—XII.
   New York.
- Koti, Hashim etc. (1996), Studies in Indian economy, Himalaya Publishing House, Mumbai.
- Kundu, Amitab & Mathur P.N (1976), Dynamic Input-output analysis K.B. Publication.
- Mathur P.N. & Bharadwaj R. (1968), An application with dynamic Input-output model for planning
- Mathur P.N. & Kulkarni A.R. etc., An inter industry capital coefficient task for India

#### Module 4:

• Sraffa, Piero (1960), Production of commodities by means of commodities Cambridge University Press, Cambridge.

### Module 4 & 5:

- Kurz, H. and Salvadori, N. (1995), Theory of Production: A Long Period Analysis, Cambridge University Press, Cambridge.
- Bharadwai, K. and Schefold, B. (eds.) (1990), Essays on Piero Sraffa, Cambridge University Press, Cambridge.
- Roncaglia, A. (1978), Sraffa and the Theory of Prices, Chichester, John Wiley and Sons.

# Module 5:

Parchure, R. (1989), The Pure Theory of Value: The Times Research Foundation Pune.

### Module 6:

- Graham, F. D. (1948), The theory of International Values; Princeton University Press
- Parchure, Rajas (1994), The Theory of International Values, Wiley Eastern, New Delhi
- McKenzie, L.W. (1954), "On Equilibrium in Graham's Model of World Trade & Other Competitive Systems," Econometrica, 22, pp. 147-161 April
- McKenzie, L.W. (1954b), "Specialization & Efficiency in World Production," Review of Economic Studies, Vol-21, pp. 166-167.
- McKenzie, L.W. (1955-56), "Specialization in Production & the Production Possibility Locus," Review of Economic Studies, Vol. 23, pp. 56-57
- Jones, R. W. (1977), "'Twoness' in Trade Theory: Costs & Benefits" Special Papers in International Economics 12.
   International Finance Section, Princeton.
- R.W. Jones (1979), International Trade: Essays in Theory, North-Holland, Amsterdam,

# ADDITIONAL READING LIST

- Pasinetti, L.L. (1977), Lectures on the theory of production: Mathematical appendix, New York, Columbia University Press.
- Koopmans, T.C. Ed. (1951), Activity analysis of production and allocation, John Wiley & Sons, New York.
- Arrow, K.J (1978) 'Cost Theoretical and Demand Theoretical Approaches to the Theory of Price Determination" in Collected Papers of Kenneth J. Arrow, Vol. 2, North-Holland, Amsterdam.
- Blaug, M. (1974) "The Cambridge Revolution: Success or Failure," London: Institute of Economic Affairs.

- Bharadwaj, K. (1970) "On the Maximum Number of Switches between Two Production System," Schweizerish Zeitschrift
  Fur Volkswirtschaft und Statistic. Vol. 106.
- Dumenil, G. and D. Levy (1985) "The Classicals and the Neoclassicals: A Rejoinder to Frank Hahn", Cambridge Journal of Economics, 9: 327-45.
- Eatwell, J. (1979) Theories of Value, Output and Employment, London: Thames Polytechnic; as repr. In Eatwell, J. and M. Milgate (eds) Keynes's Economics and the Theory of Value and Distribution, London and New York: Duckworth and Oxford University Press, 1983.
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- Fabio Petri (1999) "Hahn on the 'Neo-Recardian' Criticism of Neoclassical Economics", in the Value, Distribution and Capital eds. Gary Mongiovi and Fabio Petri, pp. 19-68,London.
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- Garegnani, P. (1990) "Reply" in Bharadwaj K. and B. Schefold eds. Essay on Piero Sraffa, Critical Perspectives on the Revival
  of Classical Theory, Oxford University Press, Oxford.
- Hahn, F.H. (1975) "Revival of Political Economy: The Wrong Issues and the Wrong Argument" Economic Record.
- Hahn, F.H. ((1982) "The Neo Ricardians", Cambridge Journal of Economics, Vol.6.
- Harcourt, G. C. (1969) "Some Cambridge Controversies in the Theory of Capital", Journal of Economic Literature, 7:369-405.
- Harcourt, G. C. (1972) "Some Cambridge Controversies in the Theory of Capital", Cambridge: Cambridge University Press.
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- Jones, R. W. (1961) "Comparative Advantages and the Theory of Tariffs: Multicountry Multi-Commodity Model", Review of Economic Studies, Vol.28.
- Jones, R. W. (1976) "'Twoness' in the Trade Theory: Costs and Benefits" in R.W. Jones (1979), *International Trade: Essay in Theory,* North.
- Kahn, R.F. (1959) "Exercises in the Analysis of Growth, "Oxford Economic Papers, Vol. II.
- Kaldor, N. (1956) "Alternative Theories of Distribution," Review of Economics Studies, Vol. 23.
- Kalecki, M. (1953) Studies in Economic Dynamics, Allen and Unwin, New York.
- Keynes, J.M. (1936) The General Theory of Employment Interest and Money, Macmillan and Co., London.
- Leontief, W.W. (1941) Studies in the Structure of the American Economy, Harvard University Press, Cambridge, Mass.
- McKenzie, L.W. (1954a) "On Equilibrium in Graham's Model of World Trade and other Competitive Systems," Econometrica, Vol.21.
- McKenzie, L.W. (1954b) "Specialization and Efficiency in World Production," Review of Economic Studies, Vol.21.
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- McKenzie, L.W. (1960) "Matrices with Dominant Diagonals and Economic Theory" in Arrows K.J., S. Karlin, P. Suppes (eds.1960) Mathematical Methods in the Social Sciences, Stanford University Press, Stanford.

- Meade J.E. (1963) "The Rate of Profit in a Growing Economy." Economic Journal. Vol.73.
- Morishima, M. (1958) "Prices, Interest and Profit in a Dynamic Leontief System, "Econometrica" Vol. XXV.
- Pasinetti, L.L. (1962) "Rate of Profit and Income Distribution in Relation to the Rate of Economic Growth," Review of Economic Studies, VOI.29.
- Pasinetti, L.L. (1978) Lectures on the Theory of Production, Macmillan, London.
- Robinson Joan (1956) The Accumulation of Capital. London: Macmillan.
- Roncaglia, A. (1979) Sraffa and the Theory of Prices, John Wiley, Chichester.
- Samuelson, P.A. (1990) "Revisionist Findings on Sraffa" in K. Bharadwaj and B. Schefold (eds. 1990)
   Essay on Piero Sraffa, Oxford University Press, Oxford.
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- Smale, S. (1976) "A Convergent Process of Price Adjustment and Global Newton Methods," Journal of Mathematical Economics, Vol.3.
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- Sraffa, P. (1932a) "Dr. Hayek on Money and Capital," Economic Journal, Vol.52.
- Sraffa, P. (1932b) "Rejoinder", Economic Journal, Vol.52.
- Sraffa, P. (1960) Production of Commodities by Means of Commodities, Cambridge University Press, Cambridge.
- Steedman, I.(1977) Marx after Sraffa, New Left Books, London.
- Stone, J.R.N. (1954) "Linear Expenditure Systems and Demand Analysis; An Application to the Pattern of British Demand," Economic Journal, Vol.164.
- Tobin J. (1959-60) "Towards a General Kaldorian Theory of Distribution." Review of Economic Studies.
- Von Neumann J. (1945-46) "A Model of General Economic Equilibrium." Review of Economic Studies. Vol.13.
- Whitin, T.M. (1953) "Classical Theory, Graham's Theory, and Linear Programing in International Trade," Quarterly Journal
  of Economics, Vol.67.

# **B-05: ECONOMICS OF LABOUR**

#### **PREAMBLE**

This course provides an introduction to labour economics and surveys existing research on a number of topics of current (if not perennial) interest in labor economics. The course is both empirical and theoretical: for each of the topics in the program, we will study some theoretical and some empirical papers, making links between the two. It will emphasise on labour market institutions and government policies that regulate the labour market.

Students will develop an appreciation of the application of economic analysis to understanding the functioning of labor markets. They will deepen their understanding of the theoretical concepts they gained in principles of economics through an in-depth study of the behavior of households and businesses in the labor market. Students will become familiar with publicly available sources of labor market data and their use in understanding labor market conditions. Knowledge of the distinctive institutional structure of labor markets in India will be obtained. Students will be able to identify and understand the major theoretical and policy issues in labor economics.

### Module 1: Supply

Static Labour-Leisure Choice – Effects of Social Programs and Income Taxes – The Life-Cycle Model – Investments in Human Capital – Collective Models of Household Labour Supply – Occupational Choice

#### Module 2: Demand

Static Cost, Profit and Labour Demand Functions – Elasticity of Derived demand: the Hicks-Marshall Rules – Adjustment Costs and Dynamic Labour Demand

### Module 3: Equilibrium

Compensating Differences – Adam Smith – Evidence on Premium for Risky or Nasty Jobs – Efficiency Wages – Segmented Labour markets – Migration

# **Module 4: Wage Structure**

Industry Wage Differentials – Productivity and Real wages – Returns to Education – Signaling – Pensions and Retirement – Training – Minimum Wage Laws

## Module 5: The Distribution of Income

Earnings by Size – The Roy Model – Functional Distribution – Intergenerational Income Mobility

# **Module 6: Cyclical Fluctuations**

Equilibrium Models of Employment Fluctuations – Real Wages over the Business Cycle

### **Module 7: Discrimination**

Economic Effects of Prejudice: Theoretical Analysis – Wage Differentials by Race and Sex

### **Module 8: Unemployment**

Definition and Measurement - Variations over time and Space - Job Search - Effects of Unemployment Insurance

### Module 9: Macroeconomics of Labour Market

Classical Analysis – Neoclassical Analysis – Keynesian Analysis – Dual and Segmented Labour Market Theory – Marxian Alternative – Human Capital theory – Flexibility and Institutions in Labour Market

### Module 10: Unions

Objectives and Political Structure – Bargaining Theories – Relative Wage Effects – Strikes – Union Growth and Decline – Unions in the Public Sector – Union-Oligopoly Models

## **Module 11: Labour Contracts**

Employment Determination – Allocation of Risk – Compensation – Bonding; Tournaments; Incentive Pay – Multitasking – Team Production – Relational Contracts – Career Concerns – Wages and Promotions

# **Module 12: Regulations and International Labour Standards**

Regulation of Labour – Experience of India vis-à-vis Other Countries – Entry and Product Market Regulation – International Labour Standards – Comparative Analysis – International Trade and Labour Markets

### BASIC READING LIST

#### Part A:

# 1. Indian Labour Market: Concepts, Definitions and Statistics

- Sundaram, K, 2001, 'Employment- Unemployment Situation in the Nineties: Some Results from the NSS 55th Round Survey', Economic and Political Weekly, P.931-40.
- 2. Pais, Jesim, 2002, 'Casualisation of Urban Labour Force: Analysis of Trends in Manufacturing' Economic and Political Weekly, P.631-652.
- Unni, Jeemol and Uma Rani, 2003, 'Employment and Income in the Informal Economy: A Micro Perspective' in Renana Jhabvala, Ratna M Sudarshan and Jeemol Unni (eds.) Informal Economy Centrestage: New Structures of Employment, Sage Publications, New Delhi.

### 2. Classical View on Employment - Say's Law and Free Market Theory

- 1. Stephen R King and McConnell Rick M, 1993, Macro Economics, New York.
- 2. Robinson, Joan, R, 1936, 'Disguised Unemployment', The Economic Journal, June.

#### 3. Keynesian View on the Labour Market

- 1. Keynes, J M, 1936, The General Theory of Employment, Interest and Money, Macmillan, London.
- 2. Chapple, Simon, 1995, 'The Kaleckian Origins of the Keynesian Model', Oxford Economic Papers, 47(3): 525-537.
- Banerjee, P C, 1960, 'Full Employment and Low Full Employment in a Developing Economy', Indian Journal of Labour Economics, 2(4): 227-243.
- 4. Rakshit, Mihir, 1983, The Labour Surplus Economy: A Neo-Keynesian Approach, Macmillan India Limited, New Delhi.

### **Extra Readings:**

- 5. Bhaduri, Amit, 1984, The Economic Structure of Backward Agriculture, Macmillan India Limited, New Delhi. (Chapter 7: Class Relations and the Pattern of Accumulation in Backward Agriculture).
- 6. J C H Fei and G Ranis, 1964, Development of the Labour Surplus Economy: Theory and Policy, Richard D Irwin, Inc, Homewood Illinois.

## 4. Neo-Classical Labour Market: Labour Supply, Labour Demand and Equilibrium

- Ashenfelter, O. and Layard, R. The Handbook of Labor Economics, Volumes 1 & 2, North-Holland, 1986; Volume 3A, 3B & 3C, 1999
- 2. Borjas, G. (1996): Labor Economics, New York: McGraw-Hill Companies
- 3. Killingsworth, M.(1983): Labor Supply, Cambridge University Press, Chapters 1,2 & 7.
- 4. Hamermesh, D. (1993): Labor Demand, Princeton University Press, Chapters 2 and 3.
- 5. Seth, V K and S C Aggarwal, The Economics of Labour Markets: Policy Regime Changes and The Process of Labour Adjustment in the Organised Industry in India. New Delhi: Ane Books, 2004.

# **Extra Readings:**

- 6. Ben Fine, Labour Market Theory: A Constructive Reassessment. London and New York: Routledge, 1998.
- 7. Joyce P Jacobsen and Gilbert L Skillman, Labour Markets and Employment Relationships: A Comprehensive Approach. London: Blackwell Publishing, 2004.
- 8. Kaufman, B. E. and Hotchkiss, J. L. (1999) The Economics of Labor Markets, (fifth edition). Fort Worth: TX: Dryden Press.
- 9. Bardhan, Pranab, 1986, Land, Labour and Rural Poverty: Essays in Development Economics, Delhi: Oxford University Press. Chapters 1 and 5.

# 5. Dual Labour Markets and Segmented Labour Market Theory

- 1. Lewis, Arthur, 1954, 1954, Economic Development with Unlimited Supplies of Labour, The Manchester School.
- 2. D Jorgenson, 1961, 'The Development of a Dual Economy' Economic Journal.
- 3. J C H Fei and G Ranis, 1966, 'Agrarianism, Dualism and Economic Development' in Irma Adelman and E Thorbecke (eds.) The Theory and Design of Economic Development, John Hopkins Press, Baltimore.
- 4. M P Todaro, 1969, 'A Model of Labour Migration and Urban Unemployment in Less Developed Countries', American Economic Review.

- 5. J R Harriss and M P Todaro, 1970, 'Migration, Unemployment and Development: A Two-Sector Analysis' American Economic Review.
- 6. Basu, K, 1984, The Less Developed Economy: A Critique of Contemporary Theory, New Delhi: Oxford India Paperbacks. (Chapter 5: The structure of Dual Economy; Chapter 6: Migration and Unemployment).
- 7. A Dixit, 1973, 'Models of Dual Economies' in J A Mirrlees and N H Stern, Models of Economic Growth, Macmillan, London.
- 8. Tokman, V E, 1978, 'An Exploration into the Nature of Informal-Formal Sector Relationships', World Development, 6 (9/10): 1065-75.
- 9. Moser, Caroline, M, 1978, 'Informal Sector or Petty Commodity Production: Dualism or Dependence in Urban Development', World Development, 6 (9/10): 1041-64.
- 10. Chaudhuri, T D, 1989, 'A Theoretical Analysis of the Informal Sector, World Development, 17 (3): 351-55.
- 11. Gibson, B and B Kelley, 1994, 'A Classical Theory of the Informal Sector' The Manchester School, Vol.LXII, No.1.
- 12. Davies, Rob, 1979, 'Informal Sector or Subordinate Mode of Production', in Ray Bromley and Chris Gerry (ed.) Casual Work and Poverty in the Third World Cities, John Wiley and Sons.
- 13. Loveridge, R and A L Mok, Theories of Labour Market Segmentation: A Critique, Martinus Nijhoff Social Science Division, The Hague, (Chapter 3: Segmented Labour Markets).
- 14. Rodgers, G, 1993, 'The Creation of Employment in Segmented Labour Markets: A General Problem and its Implications in India', Indian Journal of Labour Economics, 35(1): 32-47.
- 15. Ben Fine, Labour Market Theory: A Constructive Reassessment. London and New York: Routledge, 1998.

### **Extra Readings**

- 1. Godfrey, Martin, 'Rural- Urban Migration in a Lewis Model Context, The Manchester School.
- 2. Patel, U and P Srivatsava, 1996, 'Macroeconomic Policy and Output Comovement: The Formal and Informal Sectors in India', World Development, 24 (12): 1915-23.

#### 6. Marxian Labour Theory of Value

- 1. Ben Fine, Labour Market Theory: A Constructive Reassessment. London and New York: Routledge, 1998.
- Custers, P, 1997, Capital Accumulation of Women's Labour in Asian Economies, Vistaar Publications, New Delhi. (Chapter 5: Home Based Women Labourers in the Garment Industry in West Bengal; Chapter 6: Wage Slavery among Women Garment Workers under the Factory System in Bangladesh.)

# 7. Flexibility and Institutions in the Labour Market

- 1. Bose, A J C, 1996, 'Subcontracting, Industrialisation and Labouring Conditions in India: An Appraisal', Indian Journal of Labour Economics, 39(2): 145-62.
- Holmes, John, 1986, 'The Organisation and Locational Structure of Production Subcontracting' in Allen J Scott and Michael Storper (edited) Production, Work and Territory: The Geographical Anatomy of Industrial Capitalism, Allen and Unwin, Boston
- 3. Ghose, Ajit, 1995, 'Labour Market Flexibility and the Indian Economy', Indian Journal of Labour Economics, 38(1): 55-62.
- 4. Bhaduri, Amit, 1996, 'Employment, Labour Market Flexibility and Economic Liberalisation in India', Indian Journal of Labour Economics, 39(1): 13-22.
- Mazumdar, Dipak, 1997, 'Labour Markets, Trade Patterns and Workers' Living Standards', Economic and Political Weekly, 32(9): 453-74.
- 6. Anant, T. C. A. (2000). Reforming the labour market. in: Gangopadhyay, S., Wadhwa, W.(Eds.), *Economic Reforms for the Poor*, Konark, Delhi.

# 8. Wage Determination

- 1. Basu, K, 1984, The Less Developed Economy: A Critique of Contemporary Theory, New Delhi: Oxford India Paperbacks. (Chapter 8: Efficiency Wage Hypothesis; Chapter 7: The Rural-Urban Wage Gap).
- 2. J E Stiglitz, 1976, 'The Efficiency Wage Hypothesis, Surplus Labour and Distribution of Income in LDCs', Oxford Economic Papers.
- 3. R.J. Willis, "Wage Determinants," Chapter 10 in The Handbook of Labor Economics
- 4. Kennan, J. "The Elusive Effects of Minimum Wages," Journal of Economic Literature, 1995, 33, pp1949-1965.
- 5. Divakaran, S, 1996, 'Gender Based Wage and Job Discrimination in Urban India', Indian Journal of Labour Economics, 39(2): 235-50.
- Pushpangadan, K, 1993, 'Wage Determination in a Casual Labour Market: The Case of Paddy Field Labour in India', Indian Journal of Labour Economics, 36(1): 59-65

- 7. Neumark, D. and W. Wascher "Employment Effects of Minimum and Subminimum Wages: Panel Data on State Minimum Wage Laws." *Industrial and Labour Relations Review*. 1992, 46, 55-81.
- 8. Brown, C. "Minimum Wage Laws: Are they overrated? Journal of Economic Perspectives, 1988, 2(3), 133-145.
- 9. Brown, Charles, Curtis Gilroy, and Andrew Kohen, "The Effect of the Minimum Wage on Employment and Unemployment", *Journal of Economic Literature*, (June 1982).

# 9. Unemployment

- 1. E Malinvaud, 1977, The Theory of Unemployment Reconsidered, Basil Blackwell, Oxford.
- 2. Mukhopadhyay, S, 1983, 'Unemployment, Job Search and the Optimal Waiting Time', Indian Journal of Labour Economics, 25(3): 198-217.

### Part B:

#### 10. Economics of Trade Unions

#### **Compulsory Readings:**

- 1. Booth, A.L. (1995). The economics of the trade union Cambridge University Press. Chapters 3, 4, 5, 7, and 8.
- 2. Dowrick, S. (1989). Union-Oligopoly Bargaining. *Economic Journal*, 99:1123-1142.
- 3. Ashenfelter, O. and G. E. Johnson (1969), 'Bargaining Theory, Trade Unions, and Industrial Strike Activity', *American Economic Review*, 59 (1), 35-49.

### **Supportive Readings:**

- 1. Bronars, Stephen, Donald Deere and Joseph Tracy. 1994. "The Effects of Unions on Firm Behavior: An Empirical Analysis Using Firm-Level Data," *Industrial Relations*, 33(4): 426-451.
- 2. Bronars, Stephen, Donald Deere. 1994. "Unionization and Profitability: Evidence of Spillover Effects," *Journal of Political Economy*, 102(6): 1281-1288.
- 3. Machin, Steven and Sushil Washwani. 1991. "The Effects of Unions on Organisational Change and Employment," *Economic Journal*, 101(407): 835-855.
- 4. Kraft, K. (1998). The codetermined firm in oligopoly. Economics Letters, 61(2):195-201
- 5. Majumdar, S. and Saha, B. (1998). Job security, wage bargaining and duopoly outcomes. *Journal of International Trade and Economic Development*, 7(4):389-403.
- 6. Datt R. (2000), "Regional Patterns of Industrial Relations in India: Changing Scenario after Liberalization," *Indian Journal of Labour Economics*, 43(4), 1061-1098.
- 7. Chaudhuri, K. and Pal, R. (2005) An Empirical Analysis of Industrial Disputes: Evidence from Indian States (Co-author K. Chaudhuri), Journal of Quantitative Economics, New Series Vol 3, No 1

### **Extra Readings:**

- 1. Schmidt, C. M., A. Stilz and K. F. Zimmermann (1994): "Mass Migration, Unions, and Government Interventions," *Journal of Public Economics*, 55, 185- 210.
- Calmfors, Lars and John Driffill. 1988. "Macroeconomic Effects of Centralized Wage Setting," Economic Policy, 6: 13-61.
- McDonald, I. M. and Solow, R. M. (1981). Wage bargaining and employment. American Economic Review, 71(5):896-908.
- 4. Oswald, A. J. (1982). Trade unions, wages and unemployment: What can simple models tell us? *Oxford Economic Papers*, 34(3):526(45).
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# 11. Labour Contracts

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### **Supportive Readings:**

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- 2. Levin, Jonathan. (2001). "Relational Incentive Contracts." American Economic Review 93 (3): 835-847.
- 3. Bhattacharjee, D. (2005). The effects of group incentives in an Indian firm: Evidence from payroll data. Labour, 19(1): 147-173.
- 4. Shearer, B. (2004). Piece rates, fixed wages and incentives: Evidence from a field experiment. Review of Economic Studies, 71(2): 513-34.

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## 12. Regulation and Standards

### **Compulsory Readings:**

- 1. Botero, J., Djankov, S., Porta, R. L., Lopez-De-Silanes, F., and Shleifer, A. (2004). The regulation of labour. *The Quarterly Journal of Economics*, 119(4): 1339-1382
- 2. Besley, T. and Burgess, R. (2004). Can Labour Regulation Hinder Economic Performance? Evidence from India. *The Quarterly Journal of Economics*, 119(1): 91-134
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- 6. Nickell, S. and Layard, R. (2000). Labor market institutions and economic performance. in Orley Ashenfelter and David Card (eds), *Handbook of Labor Economics*, Amsterdam: North Holland.
- 7. Johnson, George and Frank Stafford, "The Labor Market Implications of International Trade," in Orley Ashenfelter and David Card, eds., *Handbook of Labor Economics*, Volume 3, North-Holland,1999.
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- 9. Roy, Chowdhury Supriya, 2003. 'Public Sector Restructuring and Democracy: The State, Labour and Trade Unions in India.' *Journal of Development Studies*, 39(3):29-35.

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1. Anant, T. C. A. (2000). Reforming the labour market. in: Gangopadhyay, S., Wadhwa, W.(Eds.), *Economic Reforms for the Poor*, Konark, Delhi.

# Extra Readings:

- 1. Saint-Paul, G. (1998): "A Framework for Analyzing the Political Support for Active Labor Market Policy," *Journal of Public Economics*, 67, 151-65.
- Holland, Paul, "Statistics and Causal Inference," Journal of the American Statistical Association, 81(396), December 1986, pp. 945-960
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# **B-06: FINANCIAL INSTITUTIONS AND MARKETS**

### **PREAMBLE**

The positive and significant role of financial institutions & markets in the process of growth and development has been very well recognized in the literature and indeed has become more important during the last two decades as the financial systems of different countries have become integrated in the process of globalization. India is no exception and has taken far reaching measures since 1991 in this direction. It is, therefore, essential that the students of economics should be well conversant with the theory and practice of different financial institutions and markets to understand and analyse the interconnection between the monetary forces and real forces, their developmental role and limitations in shaping and influencing the monetary and related policies both at the national and international levels.

# Module 1: Financial System and Market Risk Management

Structure of Financial System, Indian Financial System at present, and Instruments—The place of financial markets in the economy — Real assets and financial claims — A framework for macro-economic analysis of financial and non-financial flows — The relation between stocks and flows. Types of Risk - importance of the risks in the competitive management of the banking institutions

Module 2: Rate of interest – International transactions – Exchange rates

# Module 3: The Central Bank, Commercial Banks and Co-operative Banks

Functions of Central Banks- The aims and objectives of the monetary policy in developed and developing countries - Instrument of monetary policy - Effectiveness of monetary policy - Credit creation and its control; Commercial Banks- Profitability and efficiency of banks- role in the economy; Co-operative Banks- Role in the economy.

# **Module 4: Specialized Financial Institutions**

Industrial Finance Corporation of India (IFCI, Industrial Development Bank of India (IDBI), Industrial Credit and Investment Corporation of India (ICICI), Industrial Investment Bank of India (IIBI), Small Industries Development Bank of India (SIDBI), SCICI Ltd., National Bank for Agriculture and Rural Development (NABARD), Export Import Bank of India, National Housing Bank.

# **Module 5: Other Financial Institutions**

Insurance Companies- types of insurance companies, Securities Firms and Investment Banks, Finance Companies, Mutual Funds, Pensions Funds.

# **Module 6: International Financial Institutions**

International Financial Institutions - IMF, World Bank, IFC, ADB, IDA, BIS (Bank of International Settlements) and their role; international financial standards and codes and issues of financial contagion.

# **Module 7: Financial Markets and Market Regulations**

Primary Markets vs. Secondary Markets, Securities Firms and Securities industry; Securities Markets- Government Securities Markets and Dealerships; Money Markets and Capital Markets- Structure and operations of Indian Money Market; Bond Markets; Mortgage Markets; Stock Markets; Foreign Exchange Markets; Other Markets: Call Money Market, Treasury Bill Market, Commercial Bills Market, Markets for Commercial and Certificate of Deposits, Discount Market, Market for Financial Guarantees, Government (Gilt-edged) Securities Market, Industrial Securities Market, Derivative Markets.

Capital Market Regulations, Money Market Regulations, and Stock Market Regulations; Role of SEBI- Its impact on the working of capital market in India; IRDA and its role in financial markets; Management of liquidity and risk; bank safety and prudential regulations; the role of central banks; government guarantees, deposit insurance, security market regulation; pension fund regulation, insurance regulation and accounting practices.

# **Module 8: International Markets**

US Money and Capital Markets, London Money and Capital Markets. Foreign Trade Finance, External Commercial Borrowings, GDR's and ADR's – Eurocurrency and Eurobond Markets.

#### **BASIC READING LIST**

- Bhole, L.M. (2003), Financial Institutions and Markets, 3<sup>rd</sup> edition, Tata Mc Graw Hill Company Ltd., New Delhi
- Bhole, L.M. (2000), Indian Financial System, Chugh publications, Allahabad.
- Edminster, R.O. (1986), Financial Institutions, Markets and Management, McGraw Hill, New York.
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- Harker, P.T. and Zenious, S.A. (2000) (Ed.) Performance of Financial Institutions, Cambridge University Press, Cambridge.
- Johnson, H.J. (1993), Financial Institutions and Markets, McGraw Hill, New York.
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- Machiraju, M.R. (1999), Indian Financial Systems, Vikas Publishing House, New Delhi.
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- Perter, S.Rose (2002), 5th Ed. Commercial Bank Management,. McGraw Hill Irwin.
- Prasad, K.N. (2001), Development of India's Financial System, Sarup & Sons, New Delhi.
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- Smith, P.F. (1978), Money and Financial Intermediation: The Theory and Structure of Financial System, Prentice Hall, Englewood-Cliffs, New Jersey.
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- Joshi, P. R., Global Capital Markets: Shopping for Finance, (2nd edt.), Tata McGraw-Hill.
- Mason, E.S. & Asher, R. E. (1973), The World Bank Since Bretton Woods, New York Times.
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- Khoury & Ghosh (1989), Recent Development in International Banking & Finance, 3 edition (September), Irwin Professional Publishing.
- Deb, K (1988), Indian Banking Since Independence, (December) South Asia Books.
- Kothari, C. R., Indian Banking, Vol. I & II
- Ghosh, D. N. (1979), Banking Policy in India: An Evaluation, Allied.
- Apte, P. G. (2002), International Financial Management, Tata McGraw Hill Publishing Co Ltd.
- Reddy, Y. V. (1986), World Bank Borrowers' Perspectives, (January) Stosius Inc/Advent Books Division.
- Vasudevan, A. (2003), Central Banking for Emerging Market Economies, (October 1), Academic Foundation.
- Rose, Peter S. (2002), Money & Capitla Markets, 8 edition (July 22) McGraw-Hill/Irwin.
- Mathur, B. L. (2000), Financial Sector Reforms, RBSA Publishers.
- RBI, Report on Trend & Progress of Banking in India 2005-06
- India Ministry of Finance, India Economic Survey

### ADDITIONAL READING LIST

#### Module 1

- Bishop, P. and D. Dixon (1992), Foreign Exchange Handbook, McGraw Hill, New York.
- Chandra, P. (1997), Financial Markets, (4th Edition), Tata McGraw Hill, New Delhi.
- Farrell, J.L. (1997), Portfolio Management, (2nd Edition), McGraw Hill, New York.
- Machiraju, H.R. (1997), International Financial Markets in India, Wheeler Publishing, Allahabad.
- Shaw, E.S. (1983), Financial Deepening in Economic Development, Oxford University Press, London.

#### Module 2

- Fenstermaker, J.V. (1969), Readings in Financial Markets and Institutions, Appleton, New York.
- Shaw, E.S. (1983), Financial Deepening in Economic Development, Oxford University Press, London.
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### Module 3

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- Gupta, S.B. (1983), Monetary Economics, S. Chand & Company, New Delhi.
- Rangaranjan, C. (1999), Indian Economics: Essays on Money and Finance, UBS Publication, New Delhi.
- RBI (1983), Functions and Working of RBI.
- Sayers, R.S. (1967), Modern Banking, Oxford University Press, New Delhi.
- Verma, J.S. (1989), A Manual of Merchant Banking, Bharat Law House, New Delhi.

### Module 5

- Bhatt, R.S. (1996), Unit Trust of India and Mutual Funds: A Study, UTI Institute of Capital Markets, Mumbai.
- Sahadevan, K.G. and M.T. Thiripalraju (1997), Mutual Funds, Prentice Hall of India, New Delhi.

# Module 7

- Fisher, G.E. and R.J. Jordon (1992), Security Analysis and Portfolio Management, Eastern Economy Edition, New Delhi.
- Goss, B.A. and B.S. Yamey (1978), The Economics of Futures Trading, Macmillan, London.
- R.B.I. (1985), Report of The Committee to Review the Working of the Monetary system (Chakravarty Committee), Bombay.
- Weller P. (1992), The Theory of Future Markets, Blackwell, Oxford.
- Gupta, L.C. (Ed.) (1999), India's Financial Markets and Institutions, Society for Capital Research and Development, Delhi.

## **Module 8**

- Brahmananda, P.R. (1982), IMF Loan and India's Economic Future, Himalaya Publishing House, Bombay.
- Chamberlain, G. (1981), Trading in Options, Woodhed-Faulker, Cambridge.
- Crocker, A. (1982), International Money: Issues and Analysis, The English Language Book Society, Nelson, London.
- Kindleberger, C.P. (1996), A History of Financial Crisis, Manias, Panics and Crashes, John Wiley & Sons, New York.
- Mackinnon, R.J. (1979), Money in International Exchange, Oxford University Press, Oxford.
- Niehans, J. (1984), International Monetary Economics, John Hopkins University Press, New York.
- R.B.I. (1995), Report of the Working Group on Foreign Exchange Market in India, (Sodhani Group), Mumbai.
- Redseth, A. (2000), Open Economy Macroeconomics, Cambridge University Press, Cambridge.
- Yeager, L.B. (1976), International Monetary Relations: Theory, History and Policy, Harper and Row, New York

# **B-07: LAW AND ECONOMICS - I**

**PREAMBLE:** The hallmark of the new interdisciplinary field of law and economics is the application of the theories and empirical methods of economics to the legal system across the board, for example, the common law fields such as torts, contracts, property, etc. In fact, Ronald Coase's paper on "The Problem of Social Cost" (1960), Guido Calabresi's article on "Some Thoughts on Risk Distribution and the New Law" (1961), and the work of Alchian on "Some Economics of Property Rights" (1961) had applied the methods of economics to some of the areas of law. One endeavor, which is gaining momentum and respectability, is the application of economic analysis to legal problems. The works of Richard Posner's book on *Economic Analysis of Law* (1972) widely contributed to the introduction of the Law and Economics course. In addition, the economic analysis of law has extended to non-market behaviour, particularly influenced by the theoretical framework of Gary Becker on the economic analysis of crime, racial discrimination, and marriage and divorce.

Economics provides a scientific theory to predict the effects of legal sanctions on behavior. In addition to a scientific theory of behaviour, economics provides a useful normative standard for evaluating law and policy. Laws are not just arcane technical arguments. They are instruments for achieving important social goals. In order to know the effects of laws on those goals, judges and other law-makers must have a method of evaluating effects of laws on important social values. Economics predicts the effects of policies on efficiency and distribution. Economic analysis often takes for granted such legal institutions as property and contract, which dramatically affect the economy. For instance, the absence of secure property and reliable contracts paralyses the economies of some nations in third world. Economist, besides substance, can learn techniques from lawyers. For example, economists frequently support the merits of voluntary exchange, but they do not have a detailed account of what it means for exchange to be voluntary. In case of contract law, it has a complex and well-articulated theory of violation. So the economists, to find their models closer to reality, will have to listen to what the law has to teach them.

The benefits of interdisciplinary study can be had only when lawyers learn economics and economists learn something about law. Module 1 is an introduction to the concepts of economics as well as law. Modules 2 to 6 will focus on economic analysis of property law, contract law, tort law, and criminal law. Finally, Module 7 will put emphasis on competition law. Overall the course deals with the explanation of established links between the subjects of Economics and Law, and development of efficient rules and regulations.

### **Module 1: Introduction to Law and Economics**

Economic Analysis of Law: An Introduction

Why do economists need to be concerned about law? - Relationship between law and economics Economic Concepts and their relevance to Law

Legal Concepts - The Common Law and the Civil Law Traditions, Introduction to Judicial System in India, Economic Approach to Legal Rules, Methodological Aspects of Legal Rules, Efficiency, Justice and the inherent rationality of Private Law, Development of efficient Rules: Selected Cases

# **Module 2: Economic Analysis of Contract Law**

Introduction - Economic Theory of Contract - Perfect Contracts, Imperfect Contracts Economics of Remedies for Breach of Contract - Expected Damages, Opportunity Cost, Reliance Damages, Restitution, Specific Performance

Differences between Contracts and Torts - The Foreseeability Rule in Contract Law, Pure Economic loss in Torts

### **Module 3: Economic Analysis of Tort Law**

Introduction, Economic Theory of Torts Law - Accident Costs and their minimization, Liability Rules, Negligence, Contributory Negligence, Comparative Negligence, Strict Liability, Economics of Tort Liability - Liability v. Regulation, Causation in Torts, Joint and Multiple Liability, Product Liability: Producers' Responsibility, and Consumer Protection through Consumer Courts, Environmental Liability, Immaterial Damages: Pain and Suffering

# **Module 4: Economic Analysis of Property Law**

Introduction, An Economic Theory of Property, Economics of Property Law - Market strategies, Non- market strategies, Allocation of Property Rights - First come first served, Good faith purchase, Title to Land, Establishment of entitlements - Property Rule, Liability Rule, Inalienability Rule

# **Module 5: The Coase Theorem**

Externalities, Transaction Costs, Efficiency Hypothesis & Invariance Hypothesis.

# **Module 6: Economic Analysis of Criminal Law**

Introduction, Principal Types of Crime, Optimal Criminal Sanctions: Economics of Crime and Punishment, Criminal Intent, The Defence of Necessity, The Economics of Organised Crime

### **Module 7: Economic Analysis of Competition Law**

Introduction, Economic Theory of Competition Law - Workable Competition: Structure- Conduct- Performance, Competition as Dynamic Process, Reappraisal of Price Theory - Vertical Restraints: Vertical Price Fixing, Predatory Pricing: Lowering Prices, Control of Concentration: Collusion, Transaction Cost Approach, Theory of Contestable Markets, Applications to USA and EC Competition Policy

### **Module 8: Competition Policy in India**

Monopolies and Restrictive Trade Practices Act, and Competition Policy Report, Divestment of Public Sector Units and Deregulation, Regulated Competitions and Regulatory Authorities (Power, Telecom, Insurance, Banking)

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### **BASIC READING LIST**

- Posner Richard A Economic Analysis of Law (7<sup>th</sup> Edition 2007)
- Cooter Robert & Ulen Thomas- Law and Economics (5<sup>th</sup> Edition 2007)
- Shavel Steven Foundation of Economic Analysis of Law (2004)
- Harison Jeffrey L. & Theeuwes Jules Law and Economics (2008)
- Polinsky Mitchell A.- An Introduction to Law and Economics (2003)
- Friedman David D. Law's Order (2000)
- Wittman Donald A Economic Analysis of Law- Selected Reading (2003)
- Micali Thomas J.- The Economic Approach to Law (2009)
- Hirsch Werner Z. Law and Economics (1999)
- Landes Williams, Posner Richard The Economic Structure of Intellectual Property Laws (2003).
- Mercuro Nicholas, Medema Steven G. Economics & the Law- Second Edition (2006)
- Baird, Gentner & Picker Game Theory & the Law (1994)

### Further Readings

- Bouckaert, B. & De Geest, G., Encyclopedia of Law and Economics
- Burrows, Paul & Veljanovski, G. C., The Economic Approach to Law, London, Butterworths, 1981.
- Calabresi, G. The Costs of Accidents, Yale University Press, 1970.
- Divan, S. & Rosencronz, A. Environmental Law and Policy in India, Oxford University Press, New Delhi, 2001, 2<sup>nd</sup> ed.
- Laffont, J. J. & Mass., Tirole, J. A Theory of Incentives in Procurement and Regulation, Cambridge/1993.
- Munzer, S. R., A Theory of Property, Cambridge University Press, 1990.
- Newman, P., Palgrave Dictionary of Economics and the Law.
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- Williamson, O.E., The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting, The Free Press, New York, 1985.

### **Articles:**

Alessi De Louis & Staaf, R. J., "Subjective Value in Contract Law", *Journal of International and Theoretical Economics*, Vol. 145, 1989, pp. 561-577.

Bebchuk, L. A. & Shavell, S., "Information and the Scope of liability for Breach of Contract: The Rule of Hadley vs. Baxendale", *Journal of Law, Economic Organisation*, 1991, pp. 284-312.

Bradley, Fischel, "Efficient Capital Market Theory, the Market for Corporate Control and the Regulation of Cash Tender Offers" in: Posner/ Scott, Economics of Corporation Law and Securities Regulation, 1980, pp.211-214.

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Gary Becker, S. "Crime and Punishment: An Economic Approach", Journal of Political Economy, Vol. 76, 1968.

- Murali Prasad Panta, "The relative efficiency of Liability vs. Regulation in providing incentives to the tortfeasor" Journal of the Indian Law Institute, 41, (3&4), pp.405-428, 1999.
- Niskanen, W. A. "Bureaucrats and Politicians", Journal of Law and Economics, Vol. 18, 1975, pp. 617-641.
- The design of Contract and Remedies for Breach, The Quarterly Journal of Economics, 99, 1984, pp.120.
- Wadhwa, D. C., "Guaranteeing Title to Land- A Preliminary Study", Economic and Political Weekly, October 14, 1989, pp. 2323-2334.

#### Additional Reading List.

- Alchian, A. A. & "Production, Information Costs, and Economic Organisation", Demsetz, H. American Economic Review, Vol. 62, 1972, pp. 777- 795.
- Ayres, I. & Gertner, R., "Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules", The Yale law Journal, 1989, pp. 101-107.
- Calabresi, G. & Klevorick, K. A., "Four Tests for Liability in Torts", *Journal of Legal Studies*, Vol. 14, No. 3, December 1985, pp. 585-627.
- Calfee, E. John & Craswell, R., "Market Failure and the Economic Case for a Mandatory Disclosure System", Virginia Law Review, Vol. 70, 1984, pp. 717-753.
- Cooter, R., "Unity in Tort, Contract and Property: The Model of Precaution", California Law Review, 73(1), 1985, pp. 1-51.
- Demsetz, H., "When Does the Rule of Liability Matter?", Journal of Legal Studies, Vol. 1, No. 1, 1972, pp. 13-28.
- Dixit, A., "The Role of Investment in Entry Deterrence", Economic Journal, Vol. 95, 1981, pp. 95- 106.
- "The Corporate Contract", Columbia Law Review, Vol. 89, 1989, pp. 1416- 1448.
- "Mandatory Disclosure and the Protection of Investors", Virginia Law Review, Vol. 70, 1984, pp. 717-753.
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- Hansmann, H., The Economics and Ethics of Markets for Human Organs, Yale Law School Working Paper, 1988.
- Jensen, M. C. & Meckling, W. H., "The Theory of Firm, Managerial Behaviour, Agency Costs, and Ownership Structure", Journal of Financial Economics, Vol. 3, 1976, pp. 305-360.
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- Philips, L. & Moras, I. M., "The AKZO Decision: A Case of Predatory Pricing?", Journal of Industrial Economics, Vol. 41, 1993, pp. 315 - 321.
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- Sen Amartya, "The Possibility of Social Choice", American Economic Review, Vol.89 (3), 1999, pp. 349-378.
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- "An Analysis of Causation and the Scope of Liability in the Law of Torts", *Journal of Legal Studies*, Vol. 9, No. 3, June 1980, pp. 463-516.
- "Criminal Law and the Optimal Use of Non-monetary Sanctions as a Deterrent, Columbia Law Review, Vol. 85, 1985.
- Stigler, J. George, "The Economics of Information", *Journal of Political Economy*, Vol. 69, No. 3, June 1961, pp. 213-225.
- "The Theory of Economic Regulation", Bell Journal of Economics and Management Science, Vol. 2 (1), 1971, pp. 1-21.
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- Wright, W. Richard, "Causation in Tort Law", California Law Review, Vol. 73, No. 6, 1985, pp. 1735-1828.

# **B-08: LAW AND ECONOMICS - II**

### **PREAMBLE**

We have been offering the optional course "Law and Economics" for the last few years. Given the nature of enthusiastic response from students we feel that the course deserves further deepening and enlargement. This proposed course, "Law and Economics II" is the extension of the first course (as presently offered).

The primary aim of this enlargement is to develop greater applied research of legal system from economic view point and also build up the Indian experience based slant to the discipline of "Law and Economics". This course will provide not only deeper and more complex view of the subject, but also afford to take up meaningful researches in specific type of law that has immense economic bearing and implications. In particular, this course will be dealing with Indian Environmental Laws, land related legislations (including land acquisition, town- planning, SEZ) and corporate laws. This will enable more all-round perspective of the subject with rich empirical analysis. It also deals with vital areas of concern, namely economics of litigation, economic costs of "administering or not administering justice", question of back-log of cases, alternative procedures of administering justice. Similarly, the economic analysis of law making process, machinery and its efficiency will be a distinguishing feature of this course.

**Module 1: Economic Theory of Legislation:** Legislative process, Delegated legislation, Precedents, Rules v/s Standard, Interpretation of Statute

**Module 2: Economic Analysis of Litigation:** Rules of procedure, Rules of Evidence, The adversarial and inquisitorial trial mode, Alternative dispute resolution (ADR), Lok Adalat, Arbitration, Conciliation and mediation, Settlement, Appeals and error correction, Cost of litigation, Case load and Court Delay Crisis

**Module 3: Economic approach to Contract law in India:** Contract Act, Specific Relief Act, Court approach to formation, validity, performance, interpretation, breach of contract and remedies for breach

**Module 4: Economic Approach to Environmental Protection Laws:** Environmental protection laws and Court decisions, Principles and doctrines evolved by Supreme Court for protection of Environment, Air pollution, Water pollution, Sound pollution, Automobile and industrial pollution, Climate change, Carbon credits – emerging market

**Module 5: Economic Approach to Issues in Land Acquisition Laws:** Acquisition of land for public purpose, Acquisition for companies, Purpose and suitability, Market value and compensation

**Module 6: Town Planning Laws:** Allocation of land – for residential, industrial, commercial, agricultural purposes, Reservation of land for public purpose

Module 7: Special Economic Zones: Concept, Law, Policy and Problems

**Module 8: Intellectual Property Rights:** Patents, Copyrights, Trademark, Trade secrets, Plant varieties & Farmers' Rights, Salient features of Indian Laws

**Module 9: Economic Analysis of Corporate Law Issues:** Formation of a company, Share capital and fund raising, Separation of ownership and control, Majority power and minority protection, Corporate governance, Regulation of security markets and protection of investors and SEBI, Management of foreign investment and foreign exchange under FEMA

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### **BASIC READING LIST**

- Posner Richard A Economic Analysis of Law (7<sup>th</sup> Edition 2007)
- Cooter Robert & Ulen Thomas- Law and Economics (5<sup>th</sup> Edition 2007)
- Shavel Steven Foundation of Economic Analysis of Law (2004)
- Harison Jeffrey L. & Theeuwes Jules Law and Economics (2008)
- Polinsky Mitchell A An Introduction to Law and Economics (2003)
- Friedman David D. Law's Order (2000)
- Wittman Donald A Economic Analysis of Law- Selected Reading (2003)
- Micali Thomas J The Economic Approach to Law (2009)
- Hirsch Werner Z Law and Economics (1999)

- Landes Williams, Posner Richard. The Economic Structure of Intellectual Property Laws (2003)
- S Shanthakumar's Introduction to Environmental Law.

#### Module wise Reading List.

# Module 1: Economic Theory of Legislation -

- Posner: chapters 19, 20.
- Shavel: chapter 25.
- Harison: chapter 24.
- A Model of Optimal Complexity of Legal Rules- Luis Kaplow, Journal Of Law, Economics & Organisation Vol. 11, No. 1 (April, 1995) Pages 150 to 163.
- Codification & Optimal Specification of Legal Rules- Vincy Fon, Francesco Parisi, George Mason University School of Law –
   Law and Economics working paper, Source of Law and Institutional Design of Law Making.
- Legal Rules and Standards Hans Bernd Schafer. University of Hamburg, Germany. German Working Papers in Law and Economics Vol. 2002.

# Module 2: Economic Analysis of Litigation -

- Posner: chapters 21, 22, 23.
- Cooter: chapter 10.
- Shavel: chapters 17, 18, 19.
- Harison: chapters 22, 23.
- Salient Features of Civil Procedure Code, 1908 and Indian Evidence Act, 1872.

# Module 3: Economic approach to Contract law in India -

- Salient features of Contract Act & their analysis applying Law & Economic methodology.
- Specific Performance and Injunctions, Research of decided cases from Law Reporters & analysis of landmark cases decided by Supreme Court & High Courts with economic approach.

### Module 4: Economic Approach to Environmental Protection Laws -

- Harison: chapter 4.

# Module 8: Intellectual Property Rights -

- Landes and Posner: Patents chapters 11, 12.
- Copyrights: chapters 2 to 6
- Trademark: chapters 7 & 8
- Trade Secrets: chapter 13 and Shavel: chapter 7.

# Module 9: Economic Analysis of Corporate Law Issues -

- Posner: chapters 14 & 15, Economic Analysis of Law selected reading Part V.

# **Additional Reading List.**

- Posner Eric A Chicago Lectures in Law and Economics (2000)
- Posner Richard A Frontiers of Legal Theory (2001)
- Mulla Indian Contract and Specific Relief Acts.
- Patent Act, 1970.
- Copyright Act, 1957.
- Trademark Act, 1999.
- P. Narayanan Intellectual Property Law.
- Cornish & Llewelyn Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights.
- Protection of Plant Varieties & Farmer's Rights Act, 2001.
- Indian Companies Act- Salient Features.
- SEBI.
- FEMA.
- Land Acquisition Act.
- Maharashtra Town Planning Act.
- Special Economic Zones.
- Air (Prevention and Control of Pollution) Act, 1981.
- The Water (Prevention and Control of Pollution) Act, 1974.
- The Environment (Protection) Act, 1986 Rules and Notifications.

# **B-09: ECONOMIC SOCIOLOGY**

**PREAMBLE:** This course provides a broad overview of the complex relationship between economy and society. It intends to enrich the understanding of the students studying economics about how economic activities and institutions are embedded in, and affected by social structure, and enable them to apply sociological perspectives to economic phenomenon.

**Module 1:** Emergence of economic sociology and its boundaries; sociological approaches to the study of economy.

**Module 2: Classical sociological views of the economy:** Marx: critique of political economy; Durkheim: division of labour; Weber: sociology of capitalism, religious ethics and economic rationality; Polanyi: economy as instituted process.

**Module 3: Social contexts of economic action:** Economic action, varieties of embeddeness, social networks in economic behaviour, social structure and competition

**Module 4: Sociology of labour markets:** Sociological approaches to labour market; social determinants of inequalities in wage and earning

**Module 5: Sociology of consumption:** Sociological theories of consumption (Marry Douglas and Baron Isherwood: the use of goods, Jean Baudrillard: the system of objects, Pierre Bourdieu: forms of capital, Veblen: conspicuous consumption); socio-cultural aspects of consumer spending

**Module 6: Socio-cultural aspects of economic development:** Impact of religion, caste, gender, ethnicity, family on economy, social background of business groups and entrepreneurship, debate on influence of social capital and public action on economic progress; social movements and economic development

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## **BASIC READING LIST**

### Module 1:

- Dobbin, Franf. 2004, "Comparative and Historical Approaches to Economic Sociology" in Neil J. Smelser, and Richard Swedberg, (eds.) *Handbook of Economic Sociology*, Princeton: Princeton University Press.
- Granovetter, Mark. 1990, "The Old and the New Economic Sociology: A History and Agenda" in Roger Friedland and A.F. Robertson (eds.) *Beyond the Market Place*, New York: Aldine de Gruyter.
- Smelser Neil J. and Richard Swedberg. 2004, "Introducing Economic Sociology" in Neil J. Smelser, and Richard Swedberg, (eds.) *Handbook of Economic Sociology*, Princeton: Princeton University Press.
- Swedberg, Richard, 1990, Economics and Sociology Redefining their boundaries: Conversations with Economists and Sociologists, Princeton: Princeton University Press. (Concluding Discussion)
- Swedberg, Richard, 2001, "Max Weber's Vision of Economic Sociology", in Mark Granovetter and R. Swedberg, (eds.) The Sociology of Economic Life, Boulder: Westview Press.
- Swedberg, Richard, 2003, Principles of Economic Sociology, Princeton: Princeton University Press. (Chapter 1)
- Trigilia, Carlo, 2002, Economic Sociology: State, Market, and Society in Modern Capitalism, Oxford: Blackwell. (Introduction)

## Module 2:

- Bendix, Reinhard, 1960, Max Weber An Intellectual Portrait, London: Heineman. (Chapter III)
- Durkheim, Emile, 1960, *The Division of Labour in Society*, Glencoe: The Free Press. (2<sup>nd</sup> edt: Chapter one & two, 3<sup>rd</sup> edt: Chapter one)
- Gerth H. H and C. Wright Mills, 1946, From Marx Weber, New York: Oxford. (Part III: Chapter 12<sup>th</sup> &13<sup>th</sup>)
- Marx, Karl, 2002, "Grundrisse: Foundation of the Critique of Political Economy Selections from the Chapter on Capital" in Nicole Woolsey Biggart (ed.) *Readings in Economic Sociology*, Oxford: Blackwell.
- Polanyi, Karl, 2001, "The Economy as Instituted Process" in Mark Granovetter and R. Swedberg, (eds.) *The Sociology of Economic Life*, Boulder: Westview Press.
- Weber, Max, 2002, "Economy and Society: An Outline of Interpretive Sociology", in Nicole Woolsey Biggart (ed.) Readings in Economic Sociology, Oxford: Blackwell.

## Module 3:

Alejandro, Portes and Julia Sensenbrenner, 2001, "Embeddeness and Immigration: Notes on the Social Determinants of Economic Action" in Mark Granovetter and R. Swedberg, (eds.) *The Sociology of Economic Life*, Boulder: Westview Press.

- DiMaggio, Paul and Hugh Louch, 1998, "Socially Embedded Consumer Transactions: For What Kinds of Purchases Do People Most Often Use Networks", *American Sociological Review*, 63: 619-37.
- DiMaggio, Paul, 1990, "Cultural Aspects of Economic Action and Organisation", in Roger Friedland and A.F. Robertson (eds.) *Beyond the Market Place*, New York: Aldine de Gruyter.
- Granovetter, Mark, 1985, "Economic Action, Social Structure and Embeddeness", *American Journal of Sociology*, Vol. 91, pp. 481-510.
- Smith-Doerr, Laurel and Walter W. Powell, 2005, "Networks and Economic Life" in Neil J. Smelser, and Richard Swedberg, (eds.) Handbook of Economic Sociology, Princeton: Princeton University Press.
- Uzzi, Brain 2001, "Social Structure and Competition in Interfirm Networks: The Paradox of Embeddeness" in Mark Granovetter and R. Swedberg, (eds.) *The Sociology of Economic Life*, Boulder: Westview Press.

#### Module 4:

- Abbott, Andrew, 2005, "Sociology of Work and Occupations" in Neil J. Smelser, and Richard Swedberg, (eds.) *Handbook of Economic Sociology*, Princeton: Princeton University Press.
- Granovetter, Mark, 1981, "Toward a Sociological Theory of Income Differences." in Ivar Berg (eds.), Sociological Perspectives on Labor Markets, New York: Academic Press.
- Granovetter, Mark, 1998, "The Sociological and Economic Approaches to Labor Market Analysis: A Social Structural View." in George Farkers and Oaula England (eds.) *Industries, Firms, and Jobs: Sociological and Economic Approaches*, New York: Plenum Press.
- Streeck Wolfgang, 2004, "The Sociology of Labour Markets and Trade Unions" in Neil J. Smelser, and Richard Swedberg, (eds.) Handbook of Economic Sociology, Princeton: Princeton University Press.
- Weeden, Kim, 2002, "Why do some occupations pay more than others? Social Closure and Earning inequality in the United States", American Journal of Sociology, 108, (55-101).
- William P. Bridges and Robert L. Nelson 2001, "Economic and sociological approaches to Gender Inequality in Pay" in Mark Granovetter and R. Swedberg, (eds.) *The Sociology of Economic Life*, Boulder: Westview Press.

#### Module 5:

- Baudrillard, Jean, 1999, "Consumer Society" in Lawrence B. Glickman (ed.) Consumer Society In American History: A Reader, New York: Cornell University Press.
- Corrigan, Peter 1997, The Sociology of Consumption An Introduction, London: Sage Publications. (Chapter 2&3)
- Douglas, Mary, and Baron Isherwood, 1996, *The World of Goods: Towards an Anthropology of Consumption*, London: Routledge. (Part 1 : Chapter 3)
- Greetz, Cilfford 1978, "The Bazzar Economy: Information and Search in Peasant Marketing", *American Economic Review*, Vol62, pp. 28-32.
- Pierre Bourdieu, 2001, "The Forms of Capital", in Mark Granovetter and R. Swedberg, (eds.) The Sociology of Economic Life, Boulder: Westview Press.
- Roseborough, Howard 1965, "Some Sociological Dimensions of Consumer Spending" in Neil. J. Smelser (ed.) *Readings in Economic Sociology*, Berkeley: University of California Press.
- Veblen, Thorstein, 1931, *The Theory of Leisure Class*, New York: The Viking Press. Chapter IV.
- Zelizer, Viviana 2004, "Culture and Consumption" in Neil J. Smelser, and Richard Swedberg, (eds.) Handbook of Economic Sociology, Princeton: Princeton University Press.

### Module 6

- Aldrich Howard E. 2004, "Entrepreneurship", in Neil J. Smelser, and RichardSwedberg, (eds.) Handbook of Economic Sociology, Princeton: Princeton University Press.
- Coleman, James, 1999, "Social Capital in the Creation of Human Capital" American Journal of Sociology, Vol. 94.( S95-S120)
- Currie Bob. 2000, The Politics of Hunger A study of Democracy, Governance and Kalahandi's Poverty, Chennai: Macmillan. (Chapters 1,2&8)
- Dreze Jean and Amartya Sen 2002, India Development and Participation, Delhi: Oxford University Press. (Chapter 3)
- Goheen, John. 1958, India's Cultural Values and Economic Development: A Discussion, *Economic Development and Cultural Change*, Vol. 7, No. 1. (Oct.), pp. 1-12
- Granovetter, Mark, 2004, "Business Groups and Social Organisation" in Neil J. Smelser, and Richard Swedberg, (eds.) Handbook of Economic Sociology, Princeton: Princeton University Press.
- Kapp, William, 1963, Hindu Culture, Economic Development, and Economic Planning India: A Collection of Essays, Bombay: Asia Publishing House. (Part I: chapter 1, 2 &3)
- Kennedy Robert E Jr. 1965, "Protestant Ethic and the Paris" in Neil. J. Smelser (ed) *Readings in Economic Sociology*, Berkeley: University of California Press.
- Light, Ivan, 2004, "The Ethnic Economy" in Neil J. Smelser, and Richard Swedberg, (eds.) *Handbook of Economic Sociology*, Princeton: Princeton University Press.
- Mohanty, B B 2001, "Land Distribution among Scheduled Castes and Tribes" *Economic and Political Weekly*, Vol.36, No. 40. pp. 3857-68,

- Nimkoff, M.F. and Russel Middleton 1965, "Types of Family and Types of Economy" in Neil J. Smelser, and Richard Swedberg, (eds.) Handbook of Economic Sociology, Princeton: Princeton University Press.
- Ramachandran, V. K 1997, "On Keral's Development Achievements" in Jean Dreze and Amartya Sen (eds.) *Indian Development Selected Regional Perspectives*, Delhi: Oxford University Press. (Chapter 3)
- Sen, Amartya, 2004, "How does Culture Matter?" in Vijayendra Rao and Michael Walton (eds.) *Culture and Public Action*, Delhi: Permanent Black.
- Wuthnow, Robert. 2004, "New Directions in the Study of Religion and Economic Life", in Neil J. Smelser, and Richard Swedberg, (eds.) *Handbook of Economic Sociology*, Princeton: Princeton University Press.

### ADDITIONAL READING LIST:

- Kalpagam, U. 1993, Labour and Gender: Survival in Urban India. New Delhi: Sage.
- Kalpagam, U. Analytics of Work and Survival.
- Agarwal, B. 1999, The Gender and Environment Debate: Lessons from India in Menon, N. (Ed.), Gender and Politics in India. New Delhi: OUP.
- Banerjee, N. 1991, Indian Women in a Changing Industrial Scenario. New Delhi: OUP.
- Yadav, Sushma and A. Dutta Mishra (2003), Gender issues in India: Some Reflections, Radha Publications, New Delhi.

# **B-10: ENVIRONMENTAL ECONOMICS**

### **PREAMBLE**

This course is meant to provide some insights into the application of economic theory in the design and implementation of public policy related to the management of environment issues & problems. The course finds roots in welfare economics, national income accounting, macroeconomic policies and trade and development.

Modules incorporated in this paper are devoted to issues of environmental microeconomic theory & problems, market induced correctives, environmental valuation, natural resources, accounting & management. The models of optimal use of natural resources, macroeconomic issues, sustainable development and environmental resource problems in India constitute a part of the modules of this paper.

# **Module 1: Introduction**

The Economics, Ecology, and interdependence of the subjects – resource scarcity and the material balance – production and consumption – development vs. environment, and concept of sustainable development.

### Module 2: Economics of Environmental Valuation:

User value – Hedonic valuation (Indirect Method/Revealed Preference) – Travel Cost Method – Nonuser value – Contingent valuation (Direct Methods / Stated Preference).

Property rights – Coase theorem – collective action, economic instruments (charges, taxes, subsidies, and marketable permits).

### Module 3: Microeconomic Theory Market failure:

Externalities – environmental public goods – asymmetric information – risk – uncertainty – problems of free – rider, and moral hazard – transaction costs. Environmental Kuznet's curve

# **Module 4: Sustainable Development and Natural Resource Accounting:**

Definition, approaches, and indicators of sustainable development – Environmentally corrected GDP.

## **Module 5: Economics of Natural Resources**

Basic concepts – Exhaustible resources (discount rate) – Renewable resources (economic and biological efficiency level) – Bio-diversity loss.

Institutional Framework: Community participation and management of resources.

Module 6: Trade and Environment.

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## BASIC READING LIST

- Adrian Heyes & Nadkarni, M. V. (eds.) (2001), Poverty, Environment and Development, Studies of Four Countries and Pacific Region, UNESCO Principal Regional Office for Asia and Pacific, Bangkok, pp. 25-89
- Alexander Wood (eds.) (2000), The Root Cause of Bio-diversity Loss, Earthscan Publications Ltd., London
- Antweiler, Werner, Copeland, Brian R., and Taylor Scott M. (2001), Is Free Trade Good for the Environment? American Economic Review, 91(4): 877-908, September
- Baumol, W.J. and W.E. Oates (1988), The Theory of Environmental Policy, (2nd Edition), Cambridge University Press, Cambridge.
- Bromely, D.W. (Ed.) (1995), Handbook of Environmental Economics, Blackwell, London.
- Brookshire, D.S. et.al. (1982), "Valuing Public Goods; A Comparison of Survey and Hedonic Approaches', American Economic Review, 72, pp. 165-177
- Chopra, K. Kadekodi, G.K. & Murty, M. N. (1990), Participatory Development: An approach to the Management of Common Property Resources, Sage Publications, New Delhi
- Coase, R.H. (1960), "The Problem of Social Cost", Journal of Law and Economics, 3, pp. 1-44
- Copeland, Brian R., and Taylor Scott M. (1995), Trade and Transboundary Pollution, American Economic Review, 85(4): 216-737, September
- Cropper, M.L. (1992), "Environmental Economics: A Survey", The Journal of Economic Literature, 30(2), pp. 675-740
- Devarajan Shantayanam & Fisher, A.C. (1981), "Hotelling's Economics of Exhaustible Resources", Journal of Economic Literature, 19, pp. 67-73

- Fisher, A.C. (1981), Resource and Environmental Economics, Cambridge University Press, Cambridge.
- Hanley, N., J.F. Shogern and B. White (1997), Environmental Economics in Theory and Practice, Macmillan.
- Hussen, A.M. (1999), Principles of Environmental Economics, Routledge, London.
- Jeroen, C.J.M. van den Bergh (1999), Handbook of Environmental and Resource Economics, Edward Elgar Publishing Ltd.,
- Kolstad, C.D. (1999), Environmental Economics, Oxford University Press, New Delhi.
- McGrathland, A.M. & Oates W.E. (1985), "Marketable Permits for the Prevention of Environmental Deterioration', Journal
  of Environmental Economics and Management, 12(3), pp.207-228
- Ostrom, E. (1990), Governing the Commons: The Evaluation of Institutions for Collective Actions, Cambridge University Press. Cambridge
- Perman, R. Ma and J. McGilvary (1996), Natural Resource and Environmental Economics, Longman, London.
- Sankar, U. (Ed.) (2001), Environmental Economics, Oxford University Press, New Delhi.
- Tietenberg, T. (1994), Environmental Economics and Policy, Harper Collins, New York.
- Tutenlurg, Tom (2001), Environmental Economics and Policy
- Pearce, D.W. and R. Turner (1991), Economics of Natural Resource Use and Environment, John Hopkins University Press, Baltimore.

## **ADDITIONAL READING LIST**

#### Module 1

- Arrow, K.J. (1970), 'The Organization of Economic Activity: Issues Pertinent to Choice of
- Becker, G.S. (1974), Human Capital (2nd Edition), National Bureau of Economic Research, New York.
- Crones, R. and T. Sandler (1989), The Theory of Externalities and Public Goods, Cambridge University Press, Cambridge.
- Market versus Non-market Allocation' in Public Expenditure and Policy Analysis, (Ed.), Haveman, R.H. and J. Margolis, Markham, Chicago.
- Sengupta, R.P. (2001), Ecology and Economics: An Approach to Sustainable Development, Oxford University Press, New Delhi.

#### Module 2

 Smith, V. Kerry (1996), Estimating Economic Values for Nature: Methods for Non-market Valuation, Edward Elgar, Cheltenham, U.K.

## Case Studies (India)

- Chopra, K. (1998), Valuation of Bio-diversity within Protected Areas: Alternative Approaches and a Case Study, Institute of Economic Growth, Delhi.
- Hadker, N. et. al. (1997), Willing to Pay for Borivili National Park: Evidence form Contingent Valuation, Ecological Economics, Vol. 21.

### Module 3

- Dasgupta, P.S. and G.M. Heal (1985), Economic Theory and Exhaustible Resources, Cambridge University Press, Cambridge.
- Hanley, N. (1997), Environmental Economics in Theory and Practice, Macmillan, London.

# Module 4

- Chopra, K. and G.K. Kadekodi (1999), Operationalising Sustainable Development: Economic- Ecological Modelling for Developing Countries, Sage, New Delhi.
- Dasgupta, P.S. and K.G. Maler (Ed.) (1997), Environment and Emerging Development Issues, Cambridge University Press, Cambridge, Mass.
- ESCAP (1997), Accounting and Valuation of Environment A Primer for Developing Countries, Volume I, United Nations, New York.
- Hoel, M. (1997), 'International Coordination of Environmental Policies' in New Dimensions in the Economic Theory of Environment, Carrao Carlo and Domenico Siniscalco (Eds.), Cambridge University Press, Cambridge.
- United Nations (1993), Integrated Environmental and Economic Accounting, United Nations, New York.

# Module 5

- Baland, J.M. and J.P. Plateau (1994), Halting Degradation of Natural Resources: Is There a Role for Rural Communities, Oxford University Press, Oxford.
- Bhattacharya, R.N. (Ed.) (2001), Environmental Economics: An Indian Perspective, Oxford University Press, New Delhi.
- Chopra, K., G.K. Kadekodi and M.N. Murty (1990), Participatory Development: An Approach to the Management of Common Property Resources, SAGE, New Delhi.

- Chopra, K. and S.C. Gulati (2000), Migration and the Management of Common Property Resources: A Study in Western India, Sage, New Delhi.
- Kerr, J.M. et. al. (Eds.) (1997), Natural Resource Economics: Theory and Applications in India, Oxford and IBH Publication Co. Pvt. Ltd., New Delhi.
- Markandya, A. and J. Richardson (Eds.), The Earth Scan Reader in Environmental Economics, Earth Scan, London.
- Mehta, S., S. Mundle and U. Sankar (1995), Controlling Pollution: Incentives and Regulation, SAGE, New Delhi.
- Mitchell, R.C. and R.T. Carson (1993), Using Surveys to Value Public Goods: Resources for the Future, Washington, D.C.
- Murty, M.N., A. James and S. Misra (1999), The Economics of Water Pollution in India, Oxford University Press, New Delhi.
- Ostrom, E. (1990), Governing the Commons: The Evolution of Institutions for Collective Actions, Cambridge University Press, Cambridge

### Case Studies (India)

- Chopra, K., G.K. Kadekodi and M.N. Murty (1990), Participatory Development: An Approach to the Management of Common Property Resources, SAGE, New Delhi.
- Markandya, A. and M.N. Murty (2000), Cleaning up the Ganges: Cost-Benefit Analysis of Ganga Action Plan, Oxford University Press, New Delhi.
- Mehata, S., S. Mundle and U. Sankar (1995), Controlling Pollution: Incentives and Regulation, SAGE, New Delhi.
- Murty, M.N., A. James and S. Misra (1999), The Economics of Water Pollution in India, Oxford University Press, New Delhi.

#### Module 6

- Larsen, B. and A. Shaw (1994), Global Tradable Carbon Permits, Participation Incentives, and Transfers, Oxford Economic Papers, Vol. 46.
- Whalley, J. and R. Wigle (1997), 'The International Incidence of Carbon Taxes,' in Tietenberg, T. (Ed.), Economics of Global Warming, 1997, Edward Elgar, U.K.

### **OTHER REFERENCES**

- Agras, Jean and Duane Chapman (1999), A Dynamic Approach to the Environmental Kuznets Curve, Ecological Economics, 28(2): 2670277, February
- Andreoni, James and Arik Levinson (2001), The Simple Analytics of the Environmental Kuznets Curve. Journal of Public Economics, 80(2), 269-286, May
- Beckerman, W., 'Sustainable development: is it a useful concept?' 3(3): 191-209
- Costanza, R., Farber, S., Castaneda, B.E. and Grasso, M. (2001), 'Green national accounting goals and methods', in C. J. Clevelad, D.I. Stern and R. Costanza (eds.), Cheltenham, UK, Edward, Elgar, 262-282
- Costanza, R., Daly, H.E., Goodland, R. and Norgaard, R.B. (1997), Boca Raton, Fla: St. Lucie Press, International Society for Ecological Economics, Chapter 3, 6
- Diamond, Peter A. and Jerry A. Hausman (1994), Is Some Number Better Than No Number? Journal of Economic Perspectives: 8(4): 45-64, Autumn
- Ekins, P. (2002), Sustainable development in: E.A. Page and J. Proops (eds), Cheltenham: Edward Elgar, pp. 144-172
- England, R.W. (2001), 'Alternatives to gross domestic product : a critical survey', in C.J. Cleveland, D.I Stern and R. Costanza (eds.) Cheltenham, U.K., Edward Elgar, 218-237
- Gowdy, John and McDaniel Cart (1999), 'The physical destruction of Nauru: an example of weak sustainability', 75, 333-38
- Grossman, Gene M. and Alan B. Krueger (1995), Quarterly Journal of Economics, 110(2): 353-377, May
- Hanemann, Michael W. (1994), Valuing the Environment Through Contingent Valuation. Journal of Economic Perspectives: 8(14): 19-43, Autumn
- Harbaugh, William, T. Levinson, Arik, and David Molloy Wilson (2002), Reexamining the Empirical Evidence for an Environmental Kuznets Curve. Review of Economics and Statistics, 84(3): 541-551, August
- O'Connor, M. and Spash, C (1999), Cheltenham, U.K. Northampton, MA: E. Elgar Pub.
- Portney, Paul R. (1994), The Contingent Valuation Debate. Why Economists should care? Journal of Economic Perspectives 8(4): 8-17, Autumn

# **B-11: SOCIAL EXCLUSION AND INCLUSIVE POLICY**

**Preamble:** Indian society is characterized by a highly entrenched system of social stratification. This created the hindrances and denied the access to economical, cultural and educational resources to the disadvantaged groups of the society particularly, the scheduled castes, scheduled tribes, women, minorities, physically challenged and old aged groups. To understand their problems, we need to study the components of social exclusion and to formulate policy paradigms for their inclusion in the economy. This course is designed to give basic understanding of the phenomenon of 'social exclusion'. It will make possible to create awareness about the social excluded people from an economic and social policy perspective as well as to analyze social inclusive policy for them.

# **UNIT I: Understanding Social Exclusion**

Conceptualising Social Exclusion, Origin and Basis of Social Exclusion; Forms of Social Exclusion: Religion, Race, Caste, Gender, Ethnicity, Region, Culture, Language, Disability, Migrants and Refugees; Excluded Groups and Socio-Economic Disparities: Scheduled Castes, Tribals, Minorities, Women, Old Aged and the Physically Challenged; Contemporary Discussions on Social Exclusion

### **UNIT II: Theoretical Perspectives on discrimination**

Economics of Discrimination; Marxist and Liberal Perspective; Capability Approach and Theories of Poverty; Economic Justice, Economic Freedom and Welfare; Social Choice and Human Rights Approach

## **UNIT III: Social Exclusion of Caste, Tribe and Minority**

Indian society: Social Order in Caste, Tribe and Minority; Caste System as an Institution of Exclusion; Exclusion of Tribes: Nation-State Formation, Industrialization, Urbanization, Globalization etc.; Dimensions of Exclusion for Marginality: Development, Issues of Identity and Human Rights Violation

### UNIT IV: Dimensions of exclusions and inclusive policy perspectives

Scheduled Castes, Minorities and Affirmative Action; The Question of Reservation and Affirmative Action – Constitutional Provisions and Contemporary Debates with reference to the Mandal Commission Report and the Sachar Committee Report; Labour Market Discrimination, Wage Differentials, Problems of Employability, Social Security and Pension; Access to Finance, Micro Finance and Financial Inclusions of the Excluded People

# **UNIT V: Physically challenged and Old Aged Social Exclusion**

Physically Challenged and Social Exclusion: Constitutional Provisions, National and State Policies and Social Security Policy; Community Support, Awareness and Assimilation Activities; Aging: Social and Economic Exclusion; Gerontology Outlook in Policy Framework: Government Laws and Welfare Programmes

# **UNIT VI: Institutions and Inclusive Policies**

Inclusive Policy Agenda: United Nations Organization, Constitutional Provisions, Nodal Government Agencies and Planned State Interventions; Human Rights Framework, Affirmative Action and Reservation Policies; Designing Innovative Strategies for Inclusive Policies

### **READING LIST**

### UNIT I

- Sen, A. (2000), 'Social Exclusion: Concept, Application, and Scrutiny', Asian Development Bank, Manila.
- Byrne, David (2003), 'Social Exclusion: Issues in Society', Open University Press, 2005.
- Lal, A.K. (2005) (Ed.), 'Social Exclusion: Essays in Honour of Dr. Bindeshwar Pathak', New Delhi, Concept.
- Hills John, Le Grand, J. and Piachaud, D (2002) (eds.), 'Understanding Social Exclusion', Oxford University Press.
- Saith, R. (2001), 'Social Exclusion: The Concept and Application to Developing Countries', Queen Elizabeth House Working Paper Series 72, Queen Elizabeth House, Oxford.

# UNIT II

- Jordan, Bill (1996), 'A Theory of Poverty and Social Exclusion', Polity Press.
- Breman, Jan (2002), 'The Labouring Poor in India: Patterns of Exploitation, Subbordination, and Exclusion', Oxford University Press.
- Stoer, Stephen R. (2003), 'Theories of Social Exclusion (European Social Inclusion)', Lang Publishing Incorporated, Bilingual Edition.
- Becker, Gary S. (1971), 'The Economics of Discrimination', The University of Chicago Press, United States of America.
- Boulding, Kenneth (1958), 'Principles of Economic Policy', Englewood Cliffs, Prentice-Hall.
- Boulding, Kenneth (1962), 'Conflict and Defense: A General Theor'y, New York: Harper & Brothers.

- Arrow, Kenneth, J., Sen, Amartya and Suzamura, K. (2002), 'Handbook of Social Choice and Welfare, Vol. 1, Handbooks in Economics 19', Netherlands, Elsevier.

#### **UNIT III**

- Sukhadeo Thorat and Umakant (2004) (Eds.), 'Caste, Race and Discrimination: Discourses in International Context', Rawat Publications, Jaipur and New Delhi.
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# **B-12: POLITICAL ECONOMY OF INDIA'S DEVELOPMENT**

# PREAMBLE

This course is designed to offer a broad structure of major issues, debates, dilemmas, relating to the key trends, aspects, features, and the future of India's economy. The course, which is oriented in a political economy perspective, aims at imparting rich analytical insights and understanding about India's economy so that students can develop a strong sense of potential, possible, and useful areas for further research on India's development from political economy perspective

**Module 1:** Evolution of the debate over the role and ramifications of the British colonial rule for India's economy

## Module 2: India's population/demography since Independence

Broad features, major trends, and regional dimensions

### Module 3: Planning in India up to 1991

Historical roots, evolution of plan models, limitations and lessons.

# Module 4: Poverty and inequality in India

Diversity of measures and estimates; debates over the trends in the post-liberalisation period; poverty alleviation programmes and REGS and their efficacy; Self-Help Groups

# Module 5: Reforms/Liberalisation in India

Its political economy and impact, roles of market, state, and planning in India's development and its future

### **READING LIST**

#### Module 1:

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