Paper	5 B08 ECO Alternative Economics
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Module- 1	Current Trends in Economics
Topic	Current Trends in Economics
Notes No.	3

1.5 Current Trends in Economics

1. Endogenous Growth theory

The endogenous growth theory is an economic theory which argues that economic growth is generated from within a system as a direct result of internal processes. More specifically, the theory notes that the enhancement of a nation's human capital will lead to economic growth by means of the development of new forms of technology and efficient and effective means of production.

The endogenous growth theory is a new theory which explains the long-run growth rate of an economy on the basis of endogenous factors as against exogenous factors of the neoclassical growth theory. Endogenous growth theory holds that investment in human capital; innovation and knowledge are significant contributors to economic growth. The theory also focuses on positive externalities and spillover effects of a knowledge-based economy which will lead to economic development. The endogenous growth models have been developed by Arrow, Romer and Lucas, among other economists.

Endogenous growth is long-run economic growth at a rate determined by forces that are internal to the economic system, particularly those forces governing the opportunities and incentives to create technological knowledge.

2. Behavioural Economics

Behavioural Economics is related to the field of behavioural finance; study the effects of psychological, social, cognitive and emotional factors on the economic decisions of individuals and institutions and consequences for market prices, returns and the resource allocation. Behavioural economics is primarily concerned with the bounds of rationality of economic agents. Behavioural models typically integrate insights from psychology, neuroscience and microeconomic theory. Behavioural economics is an alternative

neoclassical economics. The study of behavioural economics includes how market decisions are made and the mechanisms that drive public choice. Behavioural economics explores why people sometimes make irrational decisions, and why and how their behaviour does not follow the predictions of economic models.

Richard Thaler wins Nobel Prize in Economics for pioneering work in Behavioural Economics. Notable individuals in the study of behavioural economics are Nobel laureates Gary Becker (motives, consumer mistakes; 1992), Herbert Simon (bounded rationality; 1978), Daniel Kahneman (illusion of validity, anchoring bias; 2002) and George Akerlof (procrastination; 2001).

3. Institutional Economics

Institutional economics focuses on understanding the role of the evolutionary process and the role of institutions in shaping economic behaviour. Its original focus lay in Thorstein Veblen's instinct-oriented dichotomy between technology on the one side and the "ceremonial" sphere of society on the other. Institutional economics emphasizes a broader study of institutions and views markets as a result of the complex interaction of these various institutions (e.g. individuals, firms, states, social norms). The earlier tradition continues today as a leading heterodox approach to economics.

Institutional economics focuses on learning, bounded rationality, and evolution (rather than assume stable preferences, rationality and equilibrium). It was a central part of American economics in the first part of the 20th century, including such famous but diverse economists as Thorstein Veblen, Wesley Mitchell, and John R. Commons. Some of the authors associated with this school include Robert H Frank, Daniel Bromley, Jonathan Nitzan, Shimshon, Bichler, Elinor Ostrom, Anne Mayhew, John Kenneth Galbraith and Gunnar Mydral was highly influenced by the institutionalist approach in their studies.

4. Econophysics

Econophysics is an inter-disciplinary research field, applying theories and methods originally developed by physicists in order to solve problems in Economics, usually those including uncertainty or stochastic processes and non-linear dynamics". This flourishing area of research that started in the early 1990s has already gone through an early phase of rapid growth and is now poised to become a major intellectual force in the world of academic economics. This is indicated by the gradual rise in appearance of the term "physics" and

"Econophysics" in major journals in economics. New Palgrave Dictionary of Economics published in 2008 has entries on "Econophysics (it refers to physicists standing economics problem using conceptual approached from physics) as well as economy as a complex system.

Econophysics provides a powerful new way of doing economics that stresses the importance of empirical investigation and is a viable alternative to mainstream neoclassical economics, which has been found wanting in the wake of the recent world economic crisis. Econophysics is marked by a desire to accurately describe real economic phenomena by careful observation and reproducing the empirical features with models inspired by statistical physics. Econophysics seeks to be inductive, that is, an empirically founded science based on observations, with the tools of mathematics and logic being used to identify and establish relations among these observations.

5. Neuro Ecnomics

Economics is typically defined as the science characterizing the optimal allocation of scarce resources. Neuroeconomics is a natural extension of bioeconomics. The bioeconomics research programme uses evolutionary biology to build models that predict human behaviour. A second progenitor of neuroeconomics is behavioural economics, a field that uses findings from cognitive psychology to better model human decision-making. Whereas bioeconomics has focused primarily on ultimate causes of behaviour and behavioral economics has focused on how our evolved psychologies affect decisions, the neuroeconomics research programme seeks to discover proximate causes of choice behaviour. It is proximate causes that probably provide the most leverage when seeking to affect behaviour through policy. For example, introducing laws that seek to influence individual behaviour can be done more effectively and precisely when the proximate mechanisms producing the behaviour are known.

Economics, psychology, and neuroscience are converging today into a single, unified discipline with the ultimate aim of providing a single, general theory of human behaviour. This is the emerging field of neuroeconomics in which consilience, the accordance of two or more inductions drawn from different groups of phenomena, seems to be operating. Economist and psycologists are providing rich conceptual tools for the study of the mechanism. The goal of this discipline is thus to understand the processes that connect sensation and action by revealing the neurobiological mechanisms by which decisions are made.

6. Environmental Economics

Environmental economics is concerned with the impact of the economy on the environment, the significance of the environment to the economy, and the appropriate way of regulating economic activity so that balance is achieved among environmental, economic and other social goals. In the words of D.W.Pearce, "Environmental economics brings the discipline of economic analysis to environmental issues such as pollution, the rate of use of renewable and non-renewable natural resources, conservation of living species and resources, and the choice of policy to achieve environmental ends".

Environmental Economics is a nascent sub-discipline of economics. It deals with the application of the principles of economics and study why and how human beings interact with their environment, how they use and manage environmental resources, and what are the impacts of human activities on the environment. It attempts to explain the economic aspects of attitude and behaviours of people with regards to the natural environment. It is also concerned with how economic institutions and policies can be changed to bring the environmental impacts of human activities into balance with human desires and the needs of the ecosystems. Many economic concepts and tools such as margins, consumer's surplus, producer's surplus, opportunity cost, externalities, subsidies, taxes, social welfare function, Pareto optimality and Cost Benefit Analysis have relevance and applications in analyzing environmental problems.

7. Econometrics

Econometrics deals with the measurement of economic relationships. Arthur. S. Goldberger is defined econometrics as, "a social science in which the tools of economic theory, mathematics and statistical inference are applied to the analysis of economic phenomena. The most important job of econometrician is to quantity the relationships of economic variables on the basic of available data and using statistical techniques and to interpret, use or exploit the resulting outcomes appropriately. Consequently, Econometrics is the introduction of economic theory observed data and statistical methods. It is the interaction of these three that makes Econometrics interesting, challenging and perhaps, difficult.

Econometrics is the science which combines economic theory with economic statistics and tries by mathematical and statistical methods to investigate the empirical support the general schematic law established by economic theory. Econometrics therefore makes

concrete certain theoretical economic laws by utilizing mathematics and statistics. In fact, Econometrics is not a separate branch of knowledge. It is essentially a branch of economics which consists of specific estimation methods. These methods are applicable in the general field of economic science. H.H Kelejian and W.E Oates define "Econometrics is the branch of econometrics dealing with the quantitative analysis of economic behaviour. Most of the Economists think that econometrics is only a method of analysis for studying economic phenomena. As J. Schumpeter says, "Econometrics is the application of a specific method in the general field of economic science in an effort to achieve numerical results and to verify economic theories".