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Prof. Levine highlights importance of macroeconomic models in monetary policy formulation

Dr Paul Levine, Professor of Economics at Surrey University, United Kingdom has argued that the use of various macroeconomic models in the formulation of monetary and fiscal policy will continue to be an essential component of the policy procedures followed by central banks and finance ministries in both developed and emerging economies.

Delivering a lecture on “Monetary Policy in an Uncertain World: Probability Models and the Design of Robust Monetary Rules” at a local hotel in Karachi today, Dr Levine said that current global economic crisis has highlighted the centrality of uncertainty and robustness for both policymakers and modellers. Inevitably economists differ in their theoretical frameworks and this is the most fundamental source of uncertainty, he added. “However, I would suggest there has been a remarkable convergence in the profession towards a common methodology based on firm micro-foundations and systems estimation,” he said.

The lecture, organized by State Bank of Pakistan, is the sixteenth such event held as a part of Zahid Husain Memorial Lecture series instituted in 1973.

Dr Levine’s lecture addressed the role of macroeconomic models for real world policy-making and provided a brief survey of the evolution of macroeconomic modelling strategies over the past thirty or so years. He also discussed different approaches to robustness and the concept of probability model. He also discussed in detail Dynamic Stochastic General Equilibrium (DSGE) models of emerging economies and offered some suggestions for future directions for research.

He asserted that policymakers must incorporate robustness with respect to model uncertainty that takes into account the possibility that their modelling framework is wrong and within each framework they must allow for the fact that they estimate parameter distributions and not just their mode. With parameter distribution we have in effect a distribution of models, he said. “Armed with a series of probability models across different modelling frameworks the policymaker can now incorporate risk assessment and robust rules into the conduct of policy,” he added.

Dr Levine said that there are a number of areas where DSGE models need developing, especially for emerging economies. Until recently as with their Real Business Cycle antecedents, the New Keynesian (NK) model forms still omitted involuntary unemployment. He said that another major lacuna in the NK models has been the absence of a banking sector and added the monetary transmission mechanism existed simply through one nominal interest on a riskless bond, ‘set’ by the central bank. In the context of emerging markets he argued that modeling the presence of the informal economy is another important direction for future research and directly relevant for Pakistan.

Dr Levine said that by treating DSGE models estimated by Bayesian-Maximum-Likelihood methods I have argued that they can be considered as probability models in the sense described by Sims (2007) and be used for risk-assessment and policy design. “This is true for any one model, but with a range of models on offer it is possible also to design interest rate rules that are simple and robust across the rival models and across the distribution of parameter estimates for each of these rivals,” he added. He asserted that a possible road ahead for researchers is to consider rival models as being distinguished by the model of expectations. “This would avoid becoming ‘a prisoner of a single system’ at least with respect to expectations formation where, as we have seen, there is relatively less consensus on the appropriate modelling strategy,” he added.

Mr. Justice (Retired) Nasir Aslam Zahid – the son of Mr. Zahid Husain, the first Governor of the State Bank of Pakistan – presided over the function.

Speaking on the occasion, he recounted the numerous achievements of his father. He said that his father’s contributions not only extended to the development and strengthening of Pakistan’s central bank but also to the establishment of the National Bank of Pakistan and a few other insurance companies. Mr. Aslam Zahid said that the State Bank of Pakistan was inaugurated in a record time of less than three months and the endeavours of the founding members have set an example of conviction and will power, on which the State Bank and all those involved in the economic domain of the nation can forever look back upon with great pride and inspiration.

“I express my gratitude and appreciation and that of our family towards the State Bank for honouring the memory of my father and for keeping alive the commemoration of his many contributions to the State of Pakistan during its infant years,” Mr. Aslam Zahid added.

Earlier, Syed Salim Raza Governor State Bank of Pakistan, in his opening speech paid rich tributes to Mr. Zahid Husain (late), the first Governor of SBP, on whose name this lecture series was instituted. SBP Governor said Mr. Husain was an individual of exceptional accomplishments and contributions to society and to Pakistan. “Mr. Zahid Husain developed the functions, organization and supervisory role of the Central Bank with vision and clarity. His contribution continues to underpin the effective functioning of the SBP across all its roles today,” he added.

In his remarks about Dr Levine, SBP Governor said that Dr Levine, who received PhD in Mathematics from the University of Manchester, is a well known personality for his teaching and research work. He said that Dr Levine has published more than 30 papers in the world’s leading economics journals and he is the co-author of a book “Rules Reputation and Macroeconomic Policy Coordination (CUP)”, which is now getting increasing attention after the explosion of the use of mathematical models in monetary policy making. And this is not all; his other activities have extended to include consultancy for Ofcom, visiting researcher at the IMF and the ECB, and visiting Professor at Autonomia University, Barcelona, the SBP Governor added.
