# Seminar on Optimal Regulation of Financial Innovation – October 3, 2011

Dr Tarun Ramadorai, Reader in Finance, Said School of Business, Oxford University conducted a seminar on optimal regulation of financial innovation which has emerged as an important issue in global efforts for financial stability. Officials of CAFRAL and market participants actively participated in the seminar.

The presentation commenced raising certain basic issues on the size of the financial sector relative to the real economy. "How large should the financial sector be?" was described as a Goldilocks Problem Too large a financial sector leads to excessive financialisation with commensurate systemic risk while too little inhibits the growth potential. Similarly, while framing regulation, too much could choke growth while too little raise the spectre of systemic risk.

Financial innovation and growth is the outcome of demand and supply for financial services. While a country needs a financial system that performs the role of transferring resources across time and space, managing risk, clearing and settling payments, pooling resources and providing information, the moot question is what should be its optimal size.

Looking at some aggregate statistics on the size of the financial system relative to the real economy in various countries using parameters such as the ratio of liquid liabilities to GDP, ratio of private credit by banks and financial institutions to GDP, ratio of stock-market capitalization to GDP, ratio of bond market capitalization (both public and private) to GDP, it appears that in India, the ratio using liabilities of financial intermediaries is higher relative to the ratio when using private credit. Further while stock market capitalisation is high, it is volatile and bond markets are not sufficiently well-developed relative to other economies This suggested room for growth in especially in the credit and debt markets.

Discussing the trend of financial sector growth in US, it is important to recognize that India and USA were at very different points in the evolution of the financial sector. In US there were cogent arguments suggesting that the financial sector may be the right size. He felt comparing India and the US was misleading. First, many financial "innovations" may be new to India, but not to the rest of the world. While one could rely on long historical experience of the use of these financial innovations, India-specific considerations necessitated appropriate innovation. Financial inclusion for example needed innovative ways to meet the financial needs of the people in the unique economic setting of India.

New macro regimes necessitated appropriate innovation. In a floating exchange rate regime, hedging currency risk required currency derivatives. In such a scenario, too much control of even the needed financial innovation could generate unintended consequences. For example, banning some form of payments could drive some finance underground.

Drawing from empirical studies of Philippon and Reshef, (2008), he demonstrated that wages in the financial sector relative to the non-financial sector had exponentially grown since mid 80s and so too had the education levels in the financial sector vis a vis the non-financial sector. In particular the rise was accounted for by financial activities other than retail credit and insurance. This indicated a wage premium in finance. According to Dr. Ramadorai this wage premium existed because in recent times the finance sector grew rapidly due to several large idea rich but cash poor firms depending on the financial sector to provide them the capital to grow and keep growing.

Evidence of this was available in the compustat database using data from India which indicated that firms with low levels of income represented an increasing share of aggregate capital expenditures. This showed an increasing trend towards need for outside finance for cash-poor, but idea-rich firms to grow.

The speaker further felt that financial innovation like credit information bureau for small loans could be supported by the regulators so that it was easier for the small firms/ individual entrepreneurs to access finance.

Discussing the guiding principle of what generates systemic risk, he suggested that externalities, such as collapse of an individual asset may generate negative price effects in others, e.g. foreclosures. This also has a higher impact if there are correlated assets and can then have a contagion effect as the negative wealth effects in one asset could spread via position cuts in other assets held by the same consumers. Here, he had a word of caution on regulatory spill over stemming from banning or taxing certain investments which could drive money to other investments. Hence, the right amount of regulation or optimum regulation was the key.

In this context, Dr Ramadorai illustrated with the help of data obtained from ISDA and CFTC websites that while the market volumes and value of instruments like CDS, Interest Rate and currency derivatives, equity derivatives etc have grown exponentially over the last decade, the funds appropriated for enhancing regulatory capacity has hardly seen any significant growth. This leaves a gap between the capacity of the regulator and the sophistication of the regulated entities. In the opinion of the speaker, for effective regulation and supervision of the market it was imperative to have good technology driven systems and adequately incentivized people in the regulatory institutions so that the risks arising in the markets as also within the regulated institutions could be identified in time and appropriate action taken before they escalated into systemic risks.

It was felt by some of the participants that the real sector in India was finding it difficult to obtain finance at affordable rates as the interest rates were continuing to rise steadily. One of the difficulties being faced by the derivatives and bond market was the absence of yield curves in the short run, say three to six month period. With the Repo market dictating the prices, no other independent yield curve was available in the short end of the curve. This prevented them from accessing the market for corporate bonds at affordable rates.