

**Course Title: Financial Intermediation, Markets and Institutions**

**Course Description:** This course covers theoretical and institutional aspects of banking, financial markets, financial regulation, and financial systems in seven modules. The course blends important components of financial system such as banks, financial markets and other financial institutions, first by covering each component separately and then combining them in analysis of financial systems in the last module. It also covers topics of development finance and financial risk.

Course Level: MA

Course Code: IE 531

Course Type: Optional

Credit: 4

Course Objectives: The objective of the course is

1. To provide students an exposure to theoretical, empirical and institutional aspects of the major components of a financial system, viz., financial intermediaries (banks, non-banks and microfinance institutions), financial markets (capital markets), financial regulator etc.
2. To blend theoretical and empirical aspects of financial economics.
3. To enable students to understand various financial systems through quantitative measures and qualitative analysis.

Learning Outcomes: On successful completion of this course, students will be able to

1. Apply theoretical understanding of banking and financial markets to analyse financial systems
2. Critically review the theory of financial intermediation and markets
3. Understand and explain differences between various financial systems covered by this course
4. Understand and critique research articles that apply theoretical and empirical models in banking, financial intermediation and

Course Developer: Mandira Sarma

Instructor: Mandira Sarma

## **Module 1: Introduction to Financial Intermediation, Financial Markets, Financial Institutions**

1.1. Definition of intermediation, markets and institutions with examples

1.2. Hirschleifer (1958) model -intertemporal smoothing and welfare improvement

Suggested Readings: Matthews and Thomson (Chapters 1& 2), Freixas and Rochet (Chapter 1), Houthakker and Williamson (Chapter 1)

## **Module 2: Banks**

2.1 Economic functions of a bank

Suggested readings: Freixas and Rochet (Chapter 2); Matthews and Thomson (Chapter 3); Diamond and Dybvig (1983);

2.2 Bank as a firm

Suggested Reading: Freixas and Rochet (Chapter 3); Matthews and Thomson (Chapter 6)

2.3 Credit Market – credit rationing; redlining

Suggested Reading: Freixas and Rochet (Chapter 5); Matthews and Thomson (Chapter 8); Dymski (1995); Jaffee and Stiglitz (1990)

## **Module 3: Development Finance**

3.1. Financial Inclusion – concept, measures, policies and debate

Suggested readings: Sarma (2010, 2012, 2015, 2016a, 2016b, 2023); Yangdol and Sarma (2019);

3.2 Microfinance Institutions (MFIs) – Types of MFIs; aspects of MFIs

Suggested readings: Armendariz and Morduch (Chapters 4,5)

## **Module 4: Financial Markets**

4.1. Defining Financial Instruments; definition of asset returns and market risk

Suggested readings: Campbell, Lo and MacKinlay (Chap 1); Ruey S. Tsay (Chap 1); Houthakker and Williamson (Chapter 4)

4.2. Financial markets – types; economic functions; market efficiency and efficient market hypotheses; The Capital Asset Pricing Model (CAPM) and its extensions; Stock Market indices

Suggested Readings: Houthakker and Williamson (Chapters 5, 6)

### 4.3. Derivatives markets

Suggested Readings: Houthakker and Williamson (Chapters 8, 9); John C Hull (Chapters 1,2, 3)

### 4.4 Non-Banking Financial Institutions

Suggested readings: Carmichael, J. and M. Pomerleano (Chapter 1)

## **Module 5: Financial Risk**

Types of financial risk; Measures and management of financial risk

Suggested Readings: Berton, Nesiba and Brown (Chapter 4)

## **Module 6: Financial Regulation**

6.1. Justification for banking regulation; Prudential regulation and Basel Norms

Suggested readings: Freixas and Rochet (Chapter 9); Matthews and Thompson (Chapter 11)

6.2. Credit market intervention policies with special reference to US, India, Brazil

Suggested Readings: Barr (2005); Avery et al. (2000); Byskov (2018); Mankiw (1986); RBI (2005)

6.3. Securities market regulation

Suggested Reading: Houthakker and Williamson (Chapter 11)

## **Module 7: Financial Systems**

Types of financial systems; Implication for development and financial stability; comparing financial systems – India, Germany, US

Suggested Reading: Allen and Gale (Chapters 2, 3); Allen and Gale (1995); RBI (2006); Annual Reports on the Trend and Progress of Banking in India, RBI; Annual Review of Indian Securities Market, NSE

## **Reading List in alphabetical order**

### **Books:**

1. Allen F. and D. Gale (2001), *Comparing Financial System*, The MIT Press, Cambridge
2. Armendariz, B. and J. Morduch (2005), *The Economics of Microfinance*, The MIT Press, Cambridge
3. Carmichael, Jeffery and Michael Pomerleano (2002), *The Development and Regulation of Non-Bank Financial Institutions*, The World Bank, Washington, D.C., USA
4. Hendrik S. Houthakker and Peter J. Williams (1996), *The Economics of Financial Markets*, Oxford University Press
5. J. Y. Campbell, A. W. Lo, and A. C. MacKinlay, 1997, *The Econometrics of Financial Markets*, Princeton University Press
6. John C. Hull (2015), *Options, Futures and Other Derivatives* (9<sup>th</sup> Edition), Pearson

7. Kent Matthews and John Thompson (2005), *The Economics of Banking*, John Wiley and Sons
8. R. S. Tsay, 2005, *Analysis of Financial Time Series*, Wiley Series in Probability and Statistics, 2nd edition
9. Xavier Freixas and Jean-Charles Rochet (2008), *Microeconomics of Banking* (Second Edition), The MIT Press, Cambridge

### Articles/Book Chapters/Primary Materials

1. Allen, F. and D. Gale (1995), A welfare comparison of intermediaries and financial markets in Germany and the US, *European Economic Review* 39 (1995) p 179-209
2. Baltensperger, E. (1978), Credit Rationing: Issues and Questions, *Journal of Money, Credit and Banking* vol 10 (2), p 170-183
3. Barr, Michael S. (2005), Credit Where It Counts: The Community Reinvestment Act and Its Critics. *N. Y. U. L. Rev.* 80, no. 2 (2005): p. 513-652.
4. Byskov S. (2018), Earmarked Credit and Public Banks, Chapter 6 in Spilimbergo, A. and K. Srinivasan Eds. *Brazil: boom, bust, and the road to recovery*, International Monetary Fund, 2018
5. Dymski, Gary Arthur (1995), The Theory of Bank Redlining and Discrimination: An Exploration, *The Review of Black Political Economy*, Winter 1995, p 37-74
6. RBI (2005), *Draft Technical Paper by The Internal Working Group On Priority Sector Lending*, Reserve Bank of India, Sept. 2005
7. RBI (2006), *Report on Currency and Finance, 2006-08, Vol I & II*, RBI
8. RBI (2015), *Priority Sector Lending-Targets and Classification*, Circular no. RBI/2014-15/573 dated April 23, 2015
9. Sarma, M. (2010), *Index of Financial Inclusion*, CITD Discussion Paper 10-05, Jawaharlal Nehru University, November 2010
10. Sarma, M. (2012), *Index of Financial Inclusion – A measure of financial sector inclusiveness*, Working Paper No. 07/2012, Berlin Working Papers on Money, Finance, Trade and Development, July 2012
11. Sarma, M. (2015), Measuring Financial Inclusion, *Economics Bulletin*, **35(1): 604-611** (2015)
12. Sarma, M. (2016a), Measuring Financial Inclusion using Multidimensional Data, *World Economics*, **17(1):15-40** (2016)
13. Sarma, M. (2016b), “Measuring Financial Inclusion for Asian Economies”, in S. Gopalan and T Kikuchi (Eds.) *Financial Inclusion in Asia: Issues and Policy Concerns* (2016) Palgrave Macmillan London **ISBN 978-1-137-58336-9**, pp 3-34
14. Sarma, M. (2023), “Financial Inclusion”, in Clarke, M. and Zhao, X. (Eds.) *Elgar Encyclopedia of Development*, Edward Elgar Publishing Limited, Cheltenham, UK and Northampton, USA, <http://dx.doi.org/10.4337/9781800372122> (2023), pp 247-250
15. Yangdol and Sarma (2019), “Demand-side Factors for Financial Inclusion: A Cross-country Empirical Analysis” (with Rigzin Yangdol), *International Studies*, **56 (2-3): 163-185** (2019)