



KAUTILYA SCHOOL OF PUBLIC POLICY

GITAM (Deemed to be University)

Rudraram, Patancheru Mandal

Hyderabad, Telangana 502329

Course Code: PPOL6541	Course Title: Economic Freedom, Financial Inclusion, and Digital Banking	
Trimester: 4	Course Type: Elective	Credits: 3
Home Program(s): MPP	Batch/Academic Year: 2022-2024	
Course Lead: Dr. Srinivas Yanamandra	Assigned TA/RA: Ms. Srestha Majumdar	

Course Description

The advent of technology has disrupted the traditional role of banks as financial intermediaries. In the initial phase of this disruption, banks responded by digitizing their activities and providing customer convenience. Digital banking thus witnessed proliferation of ATMs, internet banking, mobile banking, digital wallets, and automated internal processes (such credit lending decisions, portfolio monitoring and risk management).

Continued innovations in payment technology has further disrupted the banking landscape. Considering the role of payments, these innovations have further witnessed support from regulatory authorities. Plastic cards have paved the way for contactless cards. Innovations in QR code technology further made payment mechanisms seamless. Technology thus enhanced competition between banks and non-bank players in the payments space with multiple applications being launched every day on customer mobiles.

Innovations in payment technology coupled with the advent of bitcoin led to the introduction of digital currencies. Distributed ledgers and programmable money became a convenient way to transact finance through smart contracts. Several private sector players started issuing their own digital currencies exposing financial systems to various opportunities and risks. This has led to regulators responding by way of prohibitions and licensing approaches. A key regulatory response is the experiments towards central bank digital currencies.

In the private sector, the big data generated by the payment systems and digital currencies enabled fintech applications and decentralized finance. The entry of big-tech players further disrupted the competitive landscape of banking and financial services. Digital lending applications have provided several opportunities for easing the procedures for credit underwriting and assessment. They have at the same time exposed the financial sector to new risks. Regulators are today grappling with issues relating to competition and promoting level playing field for various fintech players.

This course provides a detailed introduction to these developments in digital banking and financial sector from a regulatory and policy perspective. It provides an international context to these developments. A comparative perspective of the evolution of India and China in this space is also provided in the course. Lastly, the challenges to the regulators in regulating fintech and the response by regulatory authorities are also captured in the course.

Learning Objectives

1. Evolution of money and its relevance for financial intermediation
2. Evolution of payment systems and data economy
3. Digital disruption to banking and emergence of fintech
4. Digital Currencies and the opportunities and challenges
5. Entry of Big-tech players into finance and big-data risks and regulatory challenges
6. Fintech regulatory approaches and the central bank digital currencies

Learning Outcomes

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

1. Understand the various technologies that are disrupting the digital technology space.
2. Describe the role of digital technologies in the changing landscape across various industries and governance.
3. Critically analyse developments in digital banking and financial sector from a regulatory and policy perspective
4. Demonstrate a fundamental understanding of the regulatory challenges and risk posed by innovations in digital banking and financial technologies.
5. Understand the regulatory hurdles and effective strategic mechanisms to meet the challenges posed by new technologies.

Textbooks and Course Materials

Supplementary Readings:

1. Martin, Felix. Money: the unauthorized biography from coinage to cryptocurrencies. Vintage, 2015.
2. Cooper, George. The origin of financial crises. Vintage, 2008.
3. Bernanke, B. S. (2013). The Federal Reserve and the financial crisis. Princeton University Press.
4. Vigna, P., & Casey, M. J. (2016). The age of cryptocurrency: how bitcoin and the blockchain are challenging the global economic order. Macmillan.
5. King, Brett. Bank 4.0: Banking everywhere, never at a bank. John Wiley & Sons, 2018.

Course Schedule

Unit I	Sessions: 6	Money, Banking and Financial Crisis
1. Evolution of Money as a social contract		

<ol style="list-style-type: none"> 2. Money, Banking and Financial Intermediation – An introduction 3. Financial regulation and central banking – An introduction 4. Global financial crisis 2007 – Causes and Consequences 5. Global financial crisis 2007 – Regulatory failures and reforms thereafter 6. Case Study: Stone Money of Island of Yap (Federated States of Micronesia) 		
Unit II	Sessions: 6	Digital Banking and Payment Systems
<ol style="list-style-type: none"> 1. Payment system regulatory structures after the global financial crisis 2. Evolution of Digital Banking 3. Indian Demonetization as an experiment towards digital payment 4. International Trends – Aadhaar, WeChat, Apple/Google Pay 5. Indian Perspectives – Aadhaar and the Unified Payment Interface (UPI) 6. Case Study- Comparative evolution of Payment Systems in India & China 		
Unit III	Sessions: 6	Digital Currencies and Distributed ledgers
<ol style="list-style-type: none"> 1. Digital Currencies – An introduction to Bitcoin 2. Distributed Ledgers – An overview of underlying blockchain technology 3. Digital Currency – Regulatory Issues I (Financial crimes and Money laundering) 4. Digital Currency – Regulatory Issues II (Classification, Taxation, Smart Contract regulation) 5. Central Bank Digital Currencies 6. Case Study- Facebook Diem – Digital Currency by Private Sector 		
Unit IV	Sessions: 6	Big Data, Fintech and Financial Intermediation
<ol style="list-style-type: none"> 1. Payments as a foundation for fintech and data economy 2. The experiment of Payment Banks in India 3. Fintech and Financial Disintermediation – An introduction to decentralized finance 4. Big Data and entry of Big Tech - Trust and Competition issues 5. New players in banking – The entry of challenger banks 6. Case Study - Ant Financial Services IPO – Algorithm Lending and Regulatory Issues 		
Unit V	Sessions: 6	Fintech Regulation and Central Banking in a digital age
<ol style="list-style-type: none"> 1. Fintech regulation: Key issues and perspectives (Privacy and Financial Crime Compliance) 2. Reg-tech and Sup-tech: Leveraging fintech for financial regulation 3. Regulatory sandboxes: A new framework for fintech 4. Impact of digital currencies and payments on monetary policy 5. Global fintech regulatory landscape and capacity building 6. Case Study- India Stack: Aadhaar and the Privacy Debate 		