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BA Economics Honours | Semester 3 | Calicut University

# Monetary Policy in India

Course Code: ECO3MN202 • Module 1

# Module I: Central Banking and Monetary Policy

Monetary policy in India represents the macroeconomic framework deployed by the Reserve Bank of India (RBI) to manage liquidity, regulate interest rates, and maintain price stability while supporting economic growth. Understanding the empirical definitions of money supply, historical policy objectives, and open-economy monetary management is essential for analyzing Indian central banking.

## Unit 1: Measures of Money Supply in India

Following the recommendations of the Second Working Group on Money Supply (1977) and the Third Working Group (Y.V. Reddy Committee, 1998), the RBI compiles and publishes monetary aggregates:

- **Reserve Money (High-Powered Money / Base Money - $M_0$):**

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  $$M_0 = \text{Currency in Circulation} + \text{Bankers' Deposits with RBI} + \text{'Other' Deposits with RBI}$$

  $M_0$ represents the ultimate monetary base upon which the commercial banking system constructs broad credit via the money multiplier ($m = M_3/M_0$).

- **Narrow Money ($M_1$):**

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  $$M_1 = \text{Currency with the Public} + \text{Demand Deposits with the Banking System} + \text{'Other' Deposits with RBI}$$

  Highly liquid money used directly for commercial transactions.

- **$M_2$:**

  **$M_2$**

  $$M_1 + \text{Savings Deposits with Post Office Savings Banks}$$

- **Broad Money ($M_3$):**

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  $$M_3 = M_1 + \text{Time Deposits with the Banking System}$$

  $M_3$ is the premier operational measure of aggregate money supply in the Indian economy.

- **$M_4$:**

  **$M_4$**

  $$M_3 + \text{Total Deposits with Post Office Savings Banks (excluding NSC)}$$

## Unit 2 & 3: Background, Objectives, and Types of Monetary Policy

The primary objectives of monetary policy in India have historically evolved across three broad epochs:

1. **Developmental Phase (1950–1985):** Supporting planned industrialization via targeted credit quotas, administered interest rates, and high statutory reserve requirements (CRR/SLR) to channel domestic savings to sovereign development projects.
2. **Chakravarty Committee and Multiple Indicator Era (1985–2014):** Shift toward monetary targeting with feedback, balancing growth, inflation, and external sector stability.
3. **Modern Flexible Inflation Targeting (2016–Present):** Price stability explicitly designated as the primary statutory mandate, anchored to a 4% CPI target ($\pm 2\%$).

## Unit 4: Monetary Management in an Open Economy

In an integrated global economy, monetary management is constrained by the **Impossible Trinity (Monetary Policy Trilemma)**: an economy cannot simultaneously maintain a fixed exchange rate, open capital mobility, and an independent domestic monetary policy. When massive foreign capital inflows surge into India, the RBI faces a critical operational challenge:

- To prevent rapid currency appreciation that would hurt Indian export competitiveness, the RBI purchases foreign exchange (US Dollars), adding to sovereign forex reserves.
- However, buying dollars injects massive rupee liquidity into the domestic banking system, threatening demand-pull inflation.
- To neutralize this surplus liquidity, the RBI executes **Sterilization Operations** through Open Market Operations (selling G-Secs) or issuing bonds under the **Market Stabilization Scheme (MSS)**, absorbing excess liquidity without altering the domestic policy repo rate.

## Advanced Theoretical Formulations and Empirical Frameworks (Analytical Division 1)

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### Empirical Methodology, Identification Strategies, and Econometric Estimation

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Consider the structural estimation of policy impacts across decentralized economic agents. When evaluating macroeconomic interventions or microeconomic regulatory changes, parameters estimated from observational datasets must account for expectations formation and structural parameter stability in accordance with the Lucas Critique. Consequently, contemporary applied economics bridges micro-foundations with aggregate macroeconomic phenomena through dynamic stochastic general equilibrium (DSGE) modeling and micro-econometric panel estimations.

### Comparative Institutional Analysis, Market Failures, and Policy Governance

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### Comprehensive Empirical Analysis: The Kerala Model and Sub-National Development

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However, contemporary economic analysis also highlights structural challenges confronting this development paradigm: high educated unemployment, fiscal constraints stemming from escalating public debt servicing and pension obligations, and heavy reliance on external remittance inflows from migrant workers in the Persian Gulf. Sustaining this high-welfare equilibrium necessitates transitioning toward a knowledge-driven economy, incentivizing high-tech manufacturing, and mobilizing sustainable sub-national fiscal resources.

### Policy Synthesis and Analytical Evaluation

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| Market Efficiency | Markets clear instantaneously; price mechanism allocates resources optimally without systemic friction. | Markets are prone to structural failures, information asymmetry, and coordination coordination failures. | Targeted regulatory oversight, public investment in infrastructure, and social safety nets. |
| Behavioral Motivation | Hyper-rational agents maximizing expected utility with complete cognitive computational capacity. | Bounded rationality, behavioral heuristics, loss aversion, and institutional anchoring effects. | Choice architecture, behavioral nudges (NITI Aayog initiatives), and consumer financial protection mandates. |
| State Intervention | State role restricted to core public goods, contract enforcement, and national defense (minimalist state). | State acts as developmental catalyst, risk-absorber of last resort, and promoter of equitable distribution. | Strategic industrial policy (PLI schemes), counter-cyclical fiscal intervention, and universal public services. |
| Distributional Equity | Factor rewards reflect marginal productivity; distribution is secondary to allocative efficiency. | Power asymmetries, bargaining power, and historical wealth accumulation shape distribution. | Progressive fiscal transfers, land reforms, and affirmative human capital investments. |
| Technological Progress | Exogenous technological shocks arriving randomly (Solow neoclassical growth model). | Endogenous technological innovation driven by R&D, human capital, and intellectual property institutions. | National Innovation Foundation, Startup India, and public digital infrastructure (India Stack / UPI). |

### Comprehensive Empirical Analysis: The Kerala Model and Sub-National Development

In the context of the Indian economy and sub-national development paradigms, the Kerala Model of Development provides a seminal empirical case study illustrating the complex trade-offs between social development and economic growth. Characterized by high physical quality of life indicators—including near-universal adult literacy, high life expectancy, and low infant mortality rates comparable to advanced Western economies—achieved despite historically modest per capita state domestic product, Kerala demonstrates the transformative power of public social expenditure, agrarian land reforms, and decentralized local governance (Panchayati Raj institutions).

However, contemporary economic analysis also highlights structural challenges confronting this development paradigm: high educated unemployment, fiscal constraints stemming from escalating public debt servicing and pension obligations, and heavy reliance on external remittance inflows from migrant workers in the Persian Gulf. Sustaining this high-welfare equilibrium necessitates transitioning toward a knowledge-driven economy, incentivizing high-tech manufacturing, and mobilizing sustainable sub-national fiscal resources.

### Policy Synthesis and Analytical Evaluation

Policy formulation in dynamic economic environments must therefore synthesize foundational deductive reasoning with robust inductive empirical inquiry. Economists must continuously evaluate the balance between market incentives and regulatory governance, ensuring that institutional frameworks promote both productive efficiency and distributive social justice.

## Advanced Theoretical Formulations and Empirical Frameworks (Analytical Division 9)

The theoretical structures established in this module carry far-reaching implications for empirical economic research, institutional policymaking, and dynamic market equilibrium. In contemporary economic analysis, economists employ sophisticated econometric models, institutional diagnostic frameworks, and comparative historical evaluations to rigorously assess the validity of core assumptions and their real-world outcomes across developing and advanced economies.

### Empirical Methodology, Identification Strategies, and Econometric Estimation

Empirical validation of economic models necessitates the rigorous treatment of endogeneity, omitted variable bias, and measurement error. Whether analyzing consumer behavior, firm cost structures, fiscal multipliers, or monetary transmission mechanisms, applied researchers utilize instrumental variables (IV), difference-in-differences (DiD), synthetic control methods, and regression discontinuity designs (RDD) to isolate causal relationships from mere statistical correlation.

Consider the structural estimation of policy impacts across decentralized economic agents. When evaluating macroeconomic interventions or microeconomic regulatory changes, parameters estimated from observational datasets must account for expectations formation and structural parameter stability in accordance with the Lucas Critique. Consequently, contemporary applied economics bridges micro-foundations with aggregate macroeconomic phenomena through dynamic stochastic general equilibrium (DSGE) modeling and micro-econometric panel estimations.

### Comparative Institutional Analysis, Market Failures, and Policy Governance

Economic outcomes are fundamentally mediated by institutional architectures, legal property rights regimes, and regulatory governance. In emerging market economies such as India, market imperfections—including asymmetric information, transaction costs, infrastructural bottlenecks, and credit constraints—often necessitate nuanced policy interventions that differ substantially from textbook laissez-faire predictions.

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