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# CHAPTER 2: DEMAND, SUPPLY AND MEASUREMENT OF MONEY



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Understanding key concepts in  
monetary economics

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# DEMAND FOR MONEY

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# CONCEPTS AND THEORIES OF MONEY DEMAND

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## Definition of Money Demand

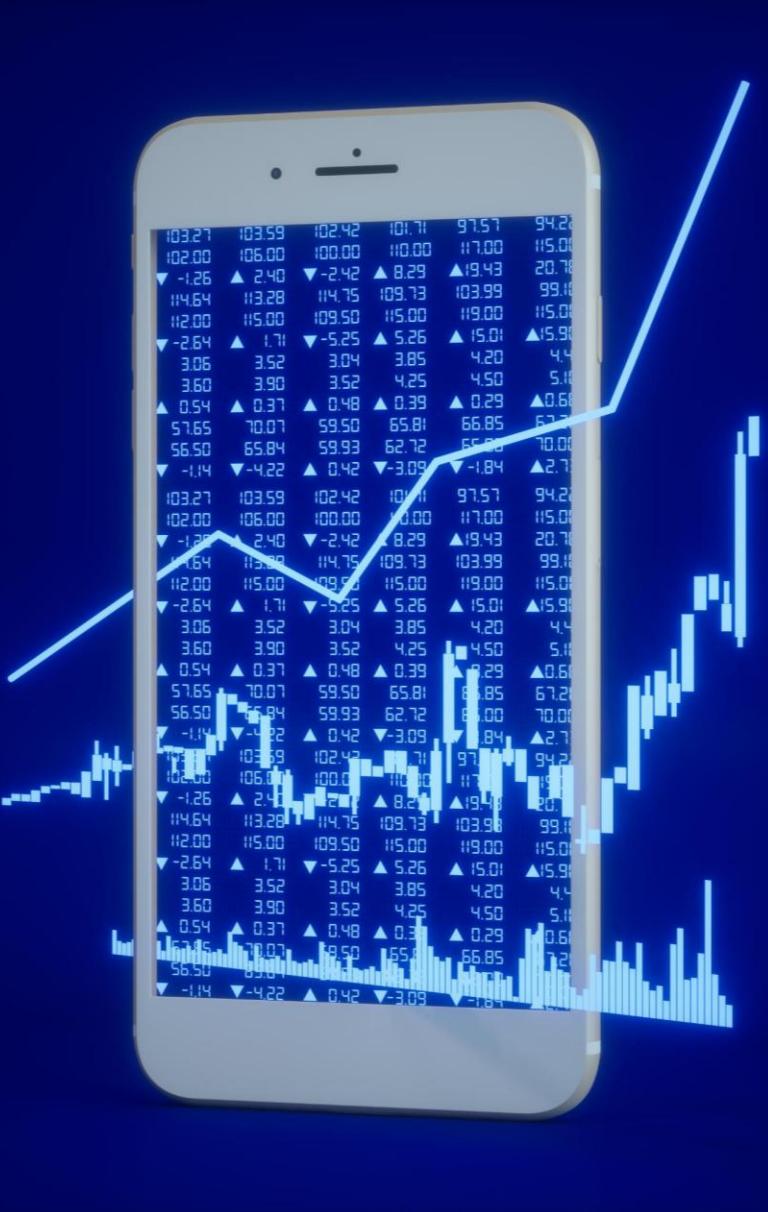
Money demand is the desire to hold money for transactions, precaution, and speculative purposes.

## Keynesian Motives

Keynes identified transaction, precautionary, and speculative motives for holding money.

## Friedman's Quantity Theory

Friedman suggested money demand depends on permanent income and expected returns on assets.



# MODELS AND DETERMINANTS OF MONEY DEMAND

## Money Demand Models

The Cambridge Equation and Baumol-Tobin model explain money demand through income, price levels, interest rates, and transaction costs.

## Key Determinants

Income, interest rates, inflation expectations, and financial innovation play essential roles in determining money demand.

## Impact of Mobile Banking

Mobile banking platforms like Telebirr reduce physical cash demand, reshaping money holding behaviors in Ethiopia.

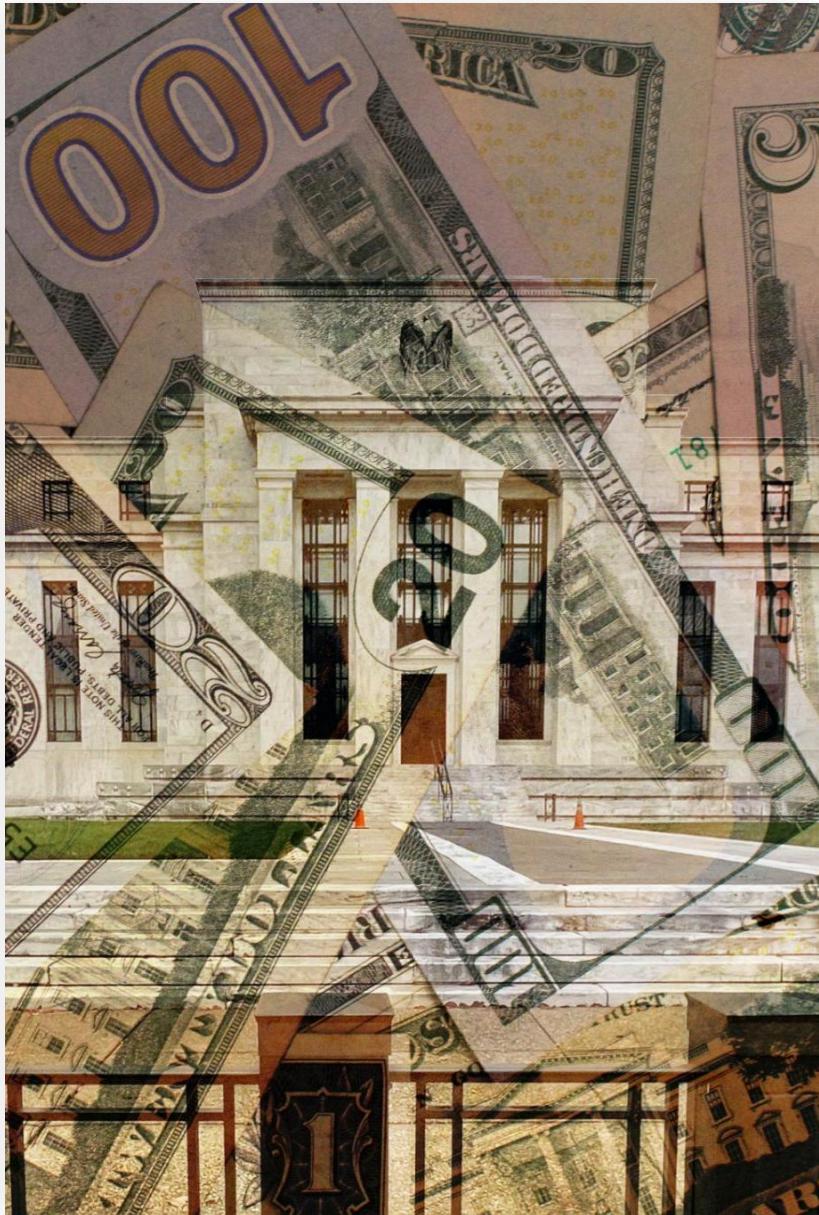
## Inflation and Transaction Motives

Inflation volatility affects speculative demand; rural and urban areas differ in transaction motives for holding money.

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# SUPPLY OF MONEY

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# DEFINITIONS AND SOURCES OF MONEY SUPPLY

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## Money Supply Definition

Money supply is the total money available in an economy, including currency and deposits.

## Categories of Money Supply

Narrow money ( $M1$ ) covers currency and demand deposits; broad money ( $M2, M3$ ) includes savings and time deposits.

## Sources of Money Supply

Central banks issue currency and regulate banks; commercial banks create money through credit expansion.

## Ethiopia's Monetary Role

The National Bank of Ethiopia manages money supply via monetary policy and regulatory frameworks.



# MONEY MULTIPLIER AND POLICY TOOLS

## Money Multiplier Concept

The money multiplier shows how deposits increase the total money supply based on the reserve ratio.

## Reserve Ratio Influence

The multiplier size depends on the reserve ratio set by central banks, influencing money creation.

## Monetary Policy Tools

Central banks use tools like reserve requirements, open market operations, and discount rate adjustments.

## Ethiopian Central Bank Practices

Ethiopia's National Bank uses treasury bills and reserves to manage liquidity and support stability.

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# VELOCITY OF CIRCULATION OF MONEY

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# CONCEPT AND FORMULA OF VELOCITY

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## Definition of Velocity

Velocity of money shows how often money changes hands within an economy over a period.

## Velocity Formula

Velocity is calculated as  $V = PY / M$ , involving price level, real output, and money supply.

## Economic Impact

Higher velocity indicates active transactions; lower velocity suggests slow economic activity.

## Influencing Factors

Technological advances, consumer confidence, and payment efficiency affect velocity of money.



# ETHIOPIAN CONTEXT OF VELOCITY

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## Cash-Based Transactions

Cash remains the dominant payment method in Ethiopia, impacting the speed of money circulation across the economy.

## Digital Payment Adoption

Mobile money platforms and point-of-sale terminals are growing, especially in Addis Ababa, increasing transaction velocity.

## Seasonal Agricultural Impact

Agricultural cycles cause fluctuations in transaction frequency, with peaks during harvest and market periods.

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# VALUE OF MONEY

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# CONCEPT AND HISTORICAL CONTEXT

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## Purchasing Power Dynamics

The value of money inversely relates to price levels, affecting its purchasing power over time.

## Historical Commodity Standards

Money historically was backed by commodities like gold and silver, providing economic stability.

## Modern Fiat Money

Today's economies use fiat money, valued by government support rather than intrinsic material worth.

## Economic and Policy Implications

Understanding money's value influences inflation control, savings, investment, and policy decisions.



# ETHIOPIAN CONTEXT OF MONEY VALUE

## Inflation and Currency Depreciation

Inflation and depreciation reduce the Ethiopian Birr's purchasing power, especially for essential goods and services.

## Transition to Fiat Currency

Ethiopia shifted from commodity-based systems to fiat currency, increasing the National Bank's role in monetary stability.

## Impact on Living Costs

Currency fluctuations affect import prices and living costs, influencing economic conditions for citizens.

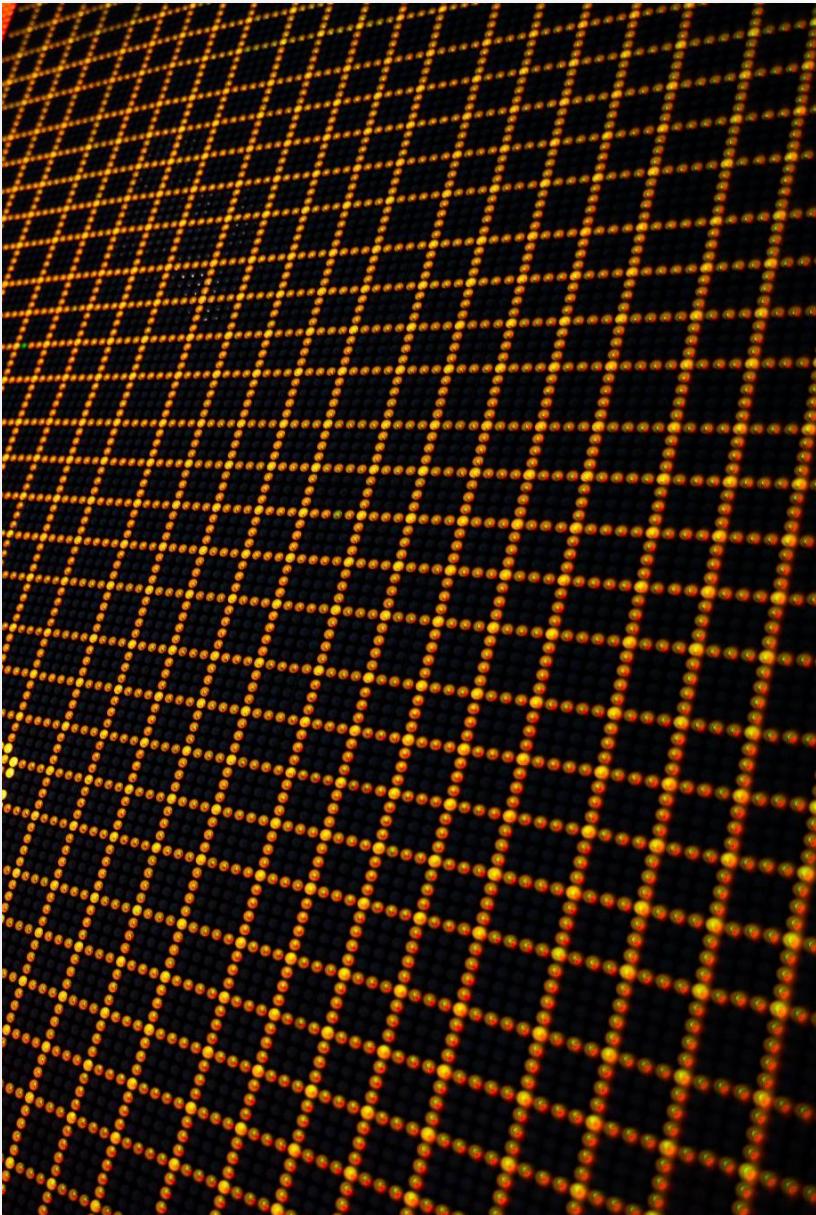
## Monetary Policy Importance

Effective monetary policy is crucial to preserving money value and supporting Ethiopia's economic development.

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# MEASUREMENT OF CHANGES IN THE VALUE OF MONEY

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# PRICE INDICES AND INFLATION TYPES

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## Price Indices Overview

Price indices like CPI, WPI, and GDP deflator measure average price changes in goods and services over time.

## Demand-Pull Inflation

Demand-pull inflation occurs when excess demand in the economy drives prices higher.

## Cost-Push Inflation

Cost-push inflation is driven by rising costs of production, pushing prices up.

## Importance of Inflation Measurement

Accurate inflation measurement supports economic planning, wage adjustments, and informed policy decisions.



# ETHIOPIAN CONTEXT OF MEASUREMENT

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## Monthly CPI Publication

Ethiopia's Central Statistics Agency releases the Consumer Price Index monthly, tracking inflation trends accurately.

## Major Inflation Contributors

Food and transportation heavily influence inflation, reflecting their importance in Ethiopian household spending.

## Economic Impact of Inflation

Rising inflation affects savings, investments, and income distribution across Ethiopian households.

## Policy Responses

Policymakers adjust interest rates and public spending to stabilize the economy and protect consumers.

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# MONETARY STANDARD

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# TYPES AND EVOLUTION OF MONETARY STANDARDS

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## Metallic Monetary Standards

Gold and silver standards provided intrinsic value and long-term currency stability historically.

## Bretton Woods System

Introduced fixed exchange rates backed by gold, shaping international currency relations until 1971.

## Fiat Money System

Currency backed by government authority, providing flexibility in monetary policy and economic responses.

## Central Banks' Role

Central banks maintain currency stability and implement policies reflecting monetary standard evolution.



# ETHIOPIAN CONTEXT OF MONETARY STANDARD

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## Fiat Monetary Standard

Ethiopia uses a fiat monetary system with the Ethiopian Birr regulated by the National Bank of Ethiopia.

## Monetary Policy Goals

The central bank focuses on price stability, economic growth support, and currency stability through monetary policy.

## Monetary Challenges

Challenges include inflation control, exchange rate management, and promoting financial inclusion across Ethiopia.

## Policy Effectiveness

Effectiveness relies on sound implementation and responses to domestic and global economic pressures.