Monetary Economics

The Nature and Economic Role of Money

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1 The Nature and Economic Role of Money

1.1 Introduction to the Economic Role of Money

Money is a core institution of modern economies. A practical working definition is that **money is any asset that is generally accepted as payment** for goods and services in a given economic community. The defining feature here is *general acceptability*: an agent accepts money in exchange not because they wish to consume it, but because they expect others to accept it in subsequent transactions.

Money matters because it makes decentralised exchange feasible at scale. In a pure barter economy, trade requires a **double coincidence of wants**: each party must have what the other desires (Jevons, 1875/1876). This requirement is restrictive and generates significant transaction costs. Money relaxes this constraint by allowing exchange to occur in (at least) two steps: sell what you have for money, then use money to purchase what you want.

Historically, many objects have served monetary roles: commodity monies (e.g., gold and silver), representative monies (claims redeemable into a commodity), and, today, **fiat money** issued by the state and/or central bank. Modern fiat money is not redeemable for a commodity and is intrinsically worthless in consumption terms; its value is sustained by institutional frameworks, legal and tax structures, and credibility. In the contemporary economy, money exists in multiple forms: physical currency, bank deposits transferable through payment systems, and central-bank reserves used for interbank settlement.

This chapter is organised around the canonical functions of money:

1. **Unit of account** (the economy's common measure of value),
2. **Medium of exchange** (the means of payment in transactions),
3. **Store of value** (an asset held over time).

We then analyse **liquidity**—the property that links money to broader asset markets—and conclude with the contrast between **Classical** and **Keynesian** perspectives on money's macroeconomic importance (Keynes, 1936).

1.2 Money as a Unit of Account

A **unit of account** is a common measure in which prices and values are expressed. This role is conceptually distinct from the medium-of-exchange role: a society could in principle use an abstract unit of account for pricing and contracting while settling transactions with other assets. In practice, however, the monetary unit (pounds, euros, dollars) typically serves as the unit of account.

1.2.1 Exchange ratios, relative prices, and the economy of measurement

The most fundamental object in valuation is the **relative price** (or exchange ratio): how many units of one good exchange for one unit of another.

Without a unit of account, describing values requires listing pairwise exchange ratios for all goods. The number of required exchange ratios grows quickly with the number of goods. With n goods, a complete barter price system requires $\frac{n(n-1)}{2}$ exchange ratios. For large n, this is approximately $n^2/2$, which becomes unmanageable as product variety increases.

A unit of account dramatically reduces informational complexity. If each good has a money price, only n prices need to be quoted, and any relative price can be computed as a ratio of two money prices. This is the **economy of measurement** created by money as unit of account.

1.2.2 The unit of account and inflation

The unit-of-account function is most useful when the unit is relatively stable in purchasing power. If the unit itself changes value unpredictably, it is like trying to measure length with a ruler that keeps changing size. Inflation makes price comparisons harder, disrupts long-term contracting, and increases the resources devoted to repricing and indexation.

In high-inflation or hyperinflation episodes, domestic money often fails as a unit of account and people may shift to a foreign currency (partial "dollarisation") or to indexed units. For example, Venezuela experienced extremely high inflation in the late 2010s, and pricing and saving behaviour increasingly moved toward stable foreign currencies (IMF DataMapper, n.d.). The general economic point is that price stability supports the unit-of-account role; instability undermines it.

1.2.3 Digital money and unit-of-account challenges

Post-2010 innovations highlight that being technologically novel is not sufficient to become a unit of account. Many cryptocurrencies are highly volatile, which makes them unattractive as pricing units for everyday goods and services. Even where legal experiments occurred—such as El Salvador's 2021 Bitcoin legal tender policy—prices and contracts largely remained denominated in dollars, not Bitcoin, consistent with the idea that a unit of account requires stability and broad trust. IMF programme documentation reports that legal changes in 2025 removed key legal-tender features (including the obligation to accept Bitcoin), reflecting limited adoption and significant policy concerns (IMF, 2025).

By contrast, **stablecoins** seek to inherit stability by pegging to a fiat unit (usually the U.S. dollar). Their "moneyness" therefore depends on the credibility of the peg and on the legal/financial structures backing the promise of convertibility.

1.3 Money as a Medium of Exchange

A **medium of exchange** is an asset that agents accept in exchange for goods and services with the intention of using it to purchase other goods and services in the future. This function is the most visible and is closely tied to money's central economic contribution: reducing transaction costs.

1.3.1 Why barter scales poorly: double coincidence of wants and search costs

Barter trade is a one-step exchange of one good for another. A monetary transaction typically involves two steps (sell for money, then buy with money), which may appear more complex at first glance. The key point is that barter requires a double coincidence of wants. In a decentralised economy with many goods and heterogeneous preferences, satisfying this condition is rare and costly.

Jevons (1875/1876) emphasised that the main friction is not conceptual but practical: it is costly to search for a counterparty who both has what you want and wants what you have. Monetary exchange solves this problem by allowing trade with any counterparty who accepts money, which—by definition—is "everyone."

1.3.2 Trading posts, market structure, and the economy of exchange

A useful way to see the role of a medium of exchange is to imagine that, without money, an economy would require a dense network of "trading posts" or market arrangements for each pair of goods. With n goods, $\frac{n(n-1)}{2}$ bilateral trading posts would be needed for direct barter across all pairs, which scales poorly. With money as a medium of exchange, each good needs only a market against money, and any two goods can be traded indirectly through money. This is the **economy of exchange** that money provides.

1.3.3 Microfoundations: money as an equilibrium response to frictions

Modern monetary economics formalised these intuitions in search-theoretic models. In seminal work, Kiyotaki and Wright (1989) show that under trading frictions, certain assets can become accepted as media of exchange because they lower transaction costs and increase the probability of successful trade. Later work (Kiyotaki & Wright, 1993) provides a broader framework for monetary exchange as a solution to decentralised trading problems.

These models help clarify why *acceptability* is both cause and consequence of being money: an asset is accepted because others accept it, creating a network effect. But acceptance

is not arbitrary; assets with suitable properties (portability, durability, divisibility, and low verification cost) are more likely to emerge as media of exchange.

1.3.4 Payment innovation: money versus the payments system

In modern economies, many transactions are executed electronically. Cards, mobile wallets, and real-time transfer systems are *payment technologies* layered on top of money. Under the hood, settlement typically occurs in central bank money (reserves and cash) and bank deposit money denominated in the national unit of account.

Cryptocurrencies have been proposed as alternative payment instruments. Empirical work suggests that, in many jurisdictions, their use as everyday payment media has been limited (Umlauft, 2018). Where adoption has been attempted at national scale, the outcomes underline the importance of stability, infrastructure, regulation, and trust.

1.4 Money as a Store of Value

Money also functions as a **store of value**: it transfers purchasing power through time. This function follows naturally from the medium-of-exchange role because sales and purchases are often separated by time; in that gap, money is held as an asset.

However, money is not the only store of value. Bonds, equities, property, and other assets store value and often deliver higher returns. Money's comparative advantage is *liquidity*—the capacity to be used immediately as a means of payment.

1.4.1 Opportunity cost of holding money

Because money typically yields little or no interest, holding money involves an **opportunity cost**: the foregone return from holding an interest-bearing asset instead. This opportunity cost is a key determinant of money demand.

Keynes (1936) emphasised that agents demand money not only for transactions but also for liquidity as a store of value under uncertainty. In this framework, the interest rate can be interpreted as a premium required to induce agents to hold less liquid assets instead of money.

1.4.2 Inflation and store-of-value performance

Inflation erodes the real value of nominal money balances. Over long horizons, cash is typically a poor store of value unless nominal interest on liquid balances compensates for inflation. When inflation is high and unpredictable, agents shift into alternative stores of value (foreign currency, real assets, indexed claims), weakening money's store-of-value role and potentially destabilising the monetary system.

Recent macroeconomic experience renewed attention to these issues. Following the COVID-19 shock, several advanced economies experienced the highest inflation rates in decades. A large empirical literature examines the roles of supply constraints, fiscal expansion, and monetary conditions; as part of this debate, BIS research has argued that money growth helps explain cross-country variation in the inflation surge, especially when inflation moves into higher regimes (Borio, Hofmann, & Zakrajšek, 2023; Borio, Hofmann, & Zakrajšek, 2024).

1.5 Liquidity: Definitions and Criteria

Liquidity is a central concept linking money to asset markets and financial stability. A practical definition is:

> **Liquidity is the ease with which an asset can be exchanged for goods and services (or converted into a generally accepted means of payment) quickly, predictably, and with little loss of value.**

Money is the most liquid asset. Other assets are "money-like" to the extent that they can be converted into money rapidly at low cost and low risk.

1.5.1 Components of liquidity

Liquidity is commonly associated with:

- **Marketability** (active markets and many potential buyers),
- **Predictability of exchange value** (low short-run price volatility),
- **Reversibility** (small bid–ask spreads and low transaction costs),
- **Divisibility** (capacity to trade in small denominations).

These criteria help explain why agents are often willing to hold money despite its low return: they obtain liquidity services in exchange for foregoing interest.

1.5.2 Monetary aggregates and "moneyness"

Because liquidity is a spectrum, monetary authorities define multiple monetary aggregates. Narrow measures (e.g., currency and demand deposits) are most liquid. Broader measures include less liquid but still money-like instruments (e.g., some savings deposits).

In the U.S., widely used series include M2, available through the Federal Reserve Bank of St. Louis FRED database (Board of Governors of the Federal Reserve System, n.d.). While definitions differ across countries, the central idea is consistent: as aggregates broaden, **liquidity declines** and **return often increases**.

1.5.3 Liquidity, crises, and central banks

Liquidity conditions can change abruptly in crises. Even normally liquid markets can become illiquid when risk aversion spikes and balance sheets are constrained, producing a "flight to liquidity." This is one reason central banks maintain lender-of-last-resort frameworks and market backstops to prevent liquidity shocks from turning into solvency crises and macroeconomic contractions.

1.5.4 CBDCs and the future composition of liquid assets

CBDCs are frequently analysed as potential new forms of sovereign money, designed to be safe and highly liquid. The Atlantic Council's CBDC Tracker reports that a large share of countries are exploring, piloting, or developing CBDCs (Atlantic Council, n.d.). If introduced at scale, CBDCs could reshape retail payments, alter the composition of liquid assets held by households, and raise new questions for banking-sector funding and financial stability.

1.6 Keynesian versus Classical Views on Money

The macroeconomic importance of money is often introduced through a contrast between **Classical** and **Keynesian** approaches.

1.6.1 The Classical view: money as a "veil" and long-run neutrality

In classical monetary thought, money is essential for transactions but largely **neutral** in the long run: changes in the money supply affect nominal variables (such as prices) but not real variables (such as output and employment), once prices fully adjust. This idea underpins the classical dichotomy and long-run neutrality propositions often associated with quantity-theoretic reasoning.

1.6.2 The Keynesian view: liquidity preference, spillovers, and real effects

Keynes argued that money is not only a medium of exchange and unit of account; it is also a store of value held for liquidity under uncertainty (Keynes, 1936). Because agents can choose to hoard money, shifts in liquidity preference can spill over into asset markets and goods markets, affecting interest rates, investment, and aggregate demand. Under price and wage rigidities, these monetary and financial conditions can affect real output and employment in the short and medium run.

1.6.3 Modern synthesis and current debates

Contemporary macroeconomics typically combines elements of both traditions: money is often viewed as approximately neutral in the long run, but monetary policy and liquidity conditions are central to short-run fluctuations. Modern frameworks often focus on interest rates and financial conditions rather than money aggregates alone (e.g., Woodford, 2003), but the post-pandemic inflation episode revived interest in money growth and liquidity alongside standard policy-rate channels (Borio et al., 2023; 2024).

1.7 Discussion Questions

1. Why does the number of required barter exchange ratios grow so rapidly as the number of goods increases? What informational problem does money solve?
2. In what sense is a stable unit of account a public good? How does inflation undermine it?
3. Using the idea of opportunity cost, explain why higher nominal interest rates typically reduce desired money holdings.
4. Why might a technologically superior payment instrument fail as "money" if it lacks broad acceptability?
5. How could CBDCs change the composition of liquid assets held by households and the banking sector?

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