

## The Fiat Standard – Lecture 4 (Fiat Mining) • Study Notes

*In fiat, **lending = mining**. New money is “issued” when licensed institutions create credit; physical cash merely converts digital balances to paper. The only durable brake isn’t code or chemistry—it’s recessions.*

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### 1) Big Picture

- **Analogy:**
  - **Gold:** dig & refine metal.
  - **Bitcoin:** expend energy, pass difficulty; predictable issuance.
  - **Fiat: issue debt;** money appears as bank credit when loans originate.
  - **Key claim:** Printing banknotes **does not** create supply; **lending does**. Notes are to fiat what an **OpenDime** is to bitcoin: a physical bearer *form* of already-existing units.
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### 2) How Fiat “Mining” Works (Step-by-Step)

1. A bank extends a loan (e.g., **\$1,000,000 mortgage**) → **new deposit** appears in seller’s account.
2. No saver’s existing deposit was transferred; **the loan created the deposit**.
3. Buyer gets a **present good** (house); seller gets **spendable cash today**; society absorbs the **default risk** via dilution/inflation.
4. Net supply each period  $\approx$  **new lending** – **repayments** – **defaults** (variable, unbounded).

**Core property:** *The system **treats future claims as present money** when the issuer is the state or a state-licensed bank.*

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### 3) Fiat vs. Gold vs. Bitcoin – Issuance Restraints

- **Gold:** Physical scarcity & non-consumption → large stock dampens new flow ( $\approx 1-2\%/yr$ ).
- **Bitcoin:** Protocol + **difficulty adjustment** → deterministic schedule (declining,  $\sim <2\%$  today).
- **Fiat:** No algorithmic cap; “restraints” are **political, legal, cultural—sporadic and unreliable**. The **effective brake** is the **bust** that follows credit booms.

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### 4) The Business Cycle as the Only Brake

- **Boom:** Credit expansion overstretches real capital (more *tickets* issued than *seats* exist).
- **Bust:** Projects liquidate, credit contracts, money supply shrinks → recession.
- **Reflation:** Policy re-expands credit to avoid pain → restarts cycle.

*Mises' maxim: “Credit expansion is not a substitute for capital.” More tickets  $\neq$  more chairs.*

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### 5) Incentives: Why Everyone Borrows (and Lends)

- **Individuals:** Mortgages/consumer credit are favored—debt gets easier in real terms if inflation outpaces interest.
- **Corporates:** “Become the bank”: issue store cards/financing; **borrow low, lend high** (e.g., 3–8% vs. 20% APR).
- **Governments/IGOs:** Debt issuance **creates money** and socializes dilution.

**Winners:** Biggest/cheapest borrowers (sovereigns, prime corporates).

**Losers:** Net savers, fixed-income earners, those denied cheap credit.

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## 6) Volatility and Levels of Money Growth

- Even “best-behaved” fiat systems show **oscillating growth** (often between ~0–10% with spikes negative in busts and >10–20% in booms).
  - **Averages matter:** Many users effectively face **double-digit annual dilution** over long spans—far above gold/Bitcoin issuance.
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## 7) Inflation: Not a Scalar, a Vector

- Official **CPI** reframes “inflation” (money growth) as “price changes,” then **games the basket** (substitution, hedonics, exclusion of housing, energy, food in key eras).
- **Vector view (Saylor):** Each good has its own inflation rate. Patterns:
- **Least inflation:** Digital/info goods & scalable industrial outputs (near-zero marginal cost) → TVs, storage, some electronics.
- **Some inflation:** Mass-produced processed foods, automated services.
- **Most inflation: Scarce** goods—prime **housing/land, quality food, healthcare, elite education, status/luxury** assets.
- **Financial assets:** The “price of future income” rises when rates are suppressed; to fund \$X of retirement income, required principal **explodes** as yields fall.

***Practical consequence:** The true cost of **providing for your future** (buying durable yield streams) rises much faster than headline CPI.*

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## 8) The Fiat Cycle (Inflate → Boom → Bust → Reflate)

1. **Inflation** is sold as “for a good cause” (wars, stimulus, development).
2. **Boom** masks resource scarcity with new claims.
3. **Bust/deflation** reveals insufficient real capital.
4. **Reflation** to avoid pain → sets up the next boom.

**Permitted debate** in mainstream econ narrows to: *how much* inflation now vs. *how much* reflation later—rarely whether persistent dilution is itself harmful.

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## 9) Consumption, Deflation, and Time Preference

- **Productivity deflation** (better, cheaper goods) does **not** halt spending; humans need present goods and invest when **marginal productivity > price** (e.g., early hard-drive buyers).
  - Fiat policy that fights benign deflation **raises time preference**: pushes **frivolous consumption** and weakens savings buffers.
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## 10) Systemic Risk Recap

- A single, inflation-prone credit engine underpins **savings, payments, banking, state finance**.
  - Society’s liquid wealth becomes **collateral** for government/creditor mistakes.
  - The network is **only as strong as its weakest lender**; dilution is **externalized** to all users.
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## 11) Study Prompts (Active Recall)

1. Explain why **loan origination** increases broad money, while **cash printing** does not.
  2. Contrast **difficulty adjustment** with fiat's **credit-cycle brake**. Why do busts become the de facto governor?
  3. Map an example purchase (house/car) showing who gets the **present good** and who bears **default risk**.
  4. Using the **inflation vector**, categorize goods you buy into low/medium/high inflation sensitivity and why.
  5. Why do corporations push private-label credit? Model the **borrow-low/lend-high** spread.
  6. How does falling yields raise the **capital required** to retire on \$50k/yr? (Back-of-envelope: required principal  $\approx$  income / yield.)
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## 12) Quotable Ideas

*"Fiat's version of mining is **getting others into debt**."*

*"No present good is sacrificed in a credit purchase; the **risk is socialized** via dilution."*

*"Credit expansion **is not** capital—issuing more tickets doesn't add seats."*

*"Inflation isn't a number; it's a **vector** across the goods you actually need to live and save."*

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