

The Bitcoin Standard – Lecture 9 (What Is Bitcoin Good For?) • Study Notes

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Big Picture

- Bitcoin's primary function is as a **store of value**, the first asset in history with a **strictly limited supply**.
 - Unlike commodities (gold, oil, silver) or fiat, Bitcoin cannot be inflated by more production or political decree.
 - This unique scarcity makes Bitcoin the hardest money ever created.
 - Understanding scarcity correctly means shifting from a fixed-resource view to an **opportunity cost and productivity** perspective.
 - Bitcoin's fixed supply means it channels economic effort into **productive goods and services** rather than money production.
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Core Claims

1. **Strict Scarcity: Bitcoin's Superpower**
2. Every resource humans have ever used can be increased with more time and effort.
3. Bitcoin alone is immune: no matter how many miners or machines, supply remains fixed.
4. This makes it uniquely suited as a long-term store of value.
5. **Opportunity Cost vs. Fixed Resources**
6. Economists often mistakenly think scarcity is about fixed quantities of resources.

7. In reality, limits come from **time and trade-offs**, not from Earth's stock of resources.
 8. Example: deepest mine is 3.5 km vs. Earth's 12,742 km diameter — we've only scratched the surface.
 9. **Reserves & Production Dynamics**
 10. Oil example: despite constant consumption, **proven reserves have grown faster than production**.
 11. Shows that scarcity is relative: human ingenuity and technology expand supply.
 12. Resource prices trend downward in real terms as productivity rises.
 13. **Technology > Resources**
 14. Wealth comes not from natural resources but from **ideas and productivity**.
 15. Singapore: rich without natural resources, proof that prosperity is built on human ingenuity.
 16. Progress is driven by technology, not resource endowment.
 17. **Stock-to-Flow & Monetary Goods**
 18. Low stock-to-flow = high inflation = wasted effort on money production.
 19. High stock-to-flow = stability, encourages productivity.
 20. Bitcoin's stock-to-flow rises over time → eventually surpassing gold → ultimate store of value.
 21. **Fiat vs. Bitcoin Costs**
 22. Critics call Bitcoin mining "wasteful."
 23. But fiat is far more wasteful: it channels massive resources into rent-seeking, debt, and unproductive sectors.
 24. Bitcoin's cost secures hard money → lowers systemic economic cost long-term.
 25. **Distribution & Inequality**
 26. Complaints about early adopters are envy-driven, not economic reasoning.
 27. Early miners took risk and delayed consumption → they earned their rewards.
 28. Bitcoin equalizes by removing monetary privilege: no one can inflate supply at others' expense.
 29. **Store of Value & Medium of Exchange**
 30. These two functions are inseparable: storing value across time inherently means exchanging value with your future self.
 31. Bitcoin already fulfills both, even if it isn't used for everyday retail payments.
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Key Concepts & Mental Models

- **Strict scarcity** → Bitcoin's defining property.
 - **Opportunity cost** → true driver of scarcity.
 - **Reserves vs. production** → technology keeps expanding supply of natural resources.
 - **Stock-to-flow** → framework for understanding money hardness.
 - **Rent-seeking vs. production** → fiat rewards the former, Bitcoin the latter.
 - **Unit of account evolution** → Bitcoin becomes more stable as liquidity grows.
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Examples & Applications

- **Oil reserves graph** → more exploration = more reserves, not depletion.
 - **Singapore prosperity** → built on productivity, not resources.
 - **Early adopters** → risk-takers who mined when Bitcoin was ignored and ridiculed.
 - **Fiat waste** → bloated academic economics, financial speculation, government boondoggles.
 - **Bitcoin mining cost vs. fiat cost** → short-term energy vs. long-term systemic waste.
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Quotable Ideas

- “Bitcoin is the only liquid commodity strictly limited in supply.” — Ammous
- “Scarcity is not about running out of stuff; it's about what we give up to get it.” — Ammous
- “Bitcoin is the cheapest way to buy the future.” — Ammous
- “Every morning an early miner held his coins, he earned them again.” — Ammous
- “Fiat rewards rent-seeking; Bitcoin rewards production.” — Ammous

Study Prompts

- Why is Bitcoin the first strictly scarce asset in history?
- Explain the difference between resource scarcity and opportunity cost.
- What does the oil reserves graph reveal about human productivity?
- How does technology drive wealth compared to natural resources?
- Why is stock-to-flow critical for monetary goods?
- Compare Bitcoin's mining cost to fiat's systemic cost.
- Why are store of value and medium of exchange inseparable?

TL;DR

Bitcoin is the first and only **strictly scarce asset** in history. All other resources can be increased with more effort; Bitcoin cannot. This makes it the hardest money, uniquely suited as a store of value. Scarcity should be understood in terms of opportunity cost, not fixed resources — human ingenuity expands supply of everything but Bitcoin. With its rising stock-to-flow, Bitcoin channels effort into productive goods rather than money printing. Early adopters earned their place by taking risks, and Bitcoin eliminates monetary privilege permanently. It is the cheapest way to buy the future.
