

The Bitcoin Standard – Lecture 3 (Monetary Metals) • Study Notes

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Big Picture

- For ~2,000 years, the world's dominant monies were **metals**.
 - **Gold and silver** emerged as the leading monetary metals, with gold ultimately winning because of its hardness and durability.
 - The introduction of **coinage** standardized weight and purity, improving salability and enabling global trade.
 - The competition between gold and silver ended with the **demonetization of silver** in the 19th century.
 - Gold's high **stock-to-flow ratio** made it the hardest money prior to Bitcoin.
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Core Claims

1. **Why Metals Became Money**
2. Metals are durable, divisible, portable, and widely recognizable.
3. Coinage increased trust and standardization, making trade more efficient.
4. Gold: most saleable across time and space.
5. Silver: most saleable across scales (smaller transactions).
6. **Gold vs. Silver**
7. Gold: indestructible, high stock-to-flow (~60), best long-term store of value.
8. Silver: useful for small denominations, but lower stock-to-flow (now ~3).
9. Industrial use and susceptibility to rust/decay weakened silver's role.
10. **The Fall of Silver**

11. Rise of banking, telegraph, and railroads enabled paper claims to replace physical coins.
 12. Once paper substitutes existed, gold-backed paper outcompeted silver-backed paper.
 13. Franco-Prussian War (1870s) was the tipping point: reparations demanded in gold → silver collapsed as money.
 14. Long-term result: demonetization of silver, destruction of Indian rupee relative to British gold-backed pound.
 15. **The Hunt Brothers' Silver Pump (1980)**
 16. Attempted to corner silver market by buying up supply.
 17. Price rose to \$50/oz → triggered massive new production and recycling (silverware melted).
 18. Supply expansion crushed price → silver exposed as “easy money” with no difficulty adjustment.
 19. **Gold's Unique Properties**
 20. Annual new supply ~1.5–2%, stable for centuries.
 21. Accumulated stock never decays.
 22. High stockpile size vs. flow prevents inflationary collapse.
 23. Still held by central banks today (~10x more than during gold standard).
 24. **Historical Lessons**
 25. Rome: prosperity rose with coinage, collapsed with debasement and inflation.
 26. Byzantium: the **solidus/bezant** coin held weight/purity for ~1,000 years, creating stability.
 27. Medieval Renaissance: Florence's florin & Venice's ducat fueled trade and capital accumulation.
 28. 19th–early 20th century: global gold standard created predictable, fixed exchange rates across nations.
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Key Concepts & Mental Models

- **Saleability** → across time (gold), scales (silver), space (portable coins).
- **Stock-to-flow ratio** → ultimate measure of hardness.
- **Demonetization** → gradual collapse of silver as money.
- **Difficulty adjustment** → Bitcoin's key innovation preventing supply inflation.

- **Extent of the market** (Adam Smith) → grows with sound, uniform money.
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Examples & Applications

- **Gold Coin ≈ Cow**: storing value over decades.
 - **Silver as “working man’s money”** vs. gold as “king’s money.”
 - **Byzantine Solidus**: 4.5g of gold, stable for centuries, still recognized today.
 - **Indian Rupee vs. British Pound**: silver vs. gold → long-term wealth divergence.
 - **Modern Central Banks**: still hoard gold while issuing fiat.
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Quotable Ideas

- “Silver is the original shitcoin.” — Ammous
 - “Gold’s hardness is its difficulty adjustment: stockpiles never decay.” — Ammous
 - “Civilizations rise on sound money and collapse when it is debased.” — Mises (paraphrased)
 - “The bezant was the only altcoin worth respecting.” — Ammous
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Study Prompts

- Why did coinage transform the role of metals as money?
- Compare gold’s saleability across time vs. silver’s saleability across scales.
- Explain how the telegraph and railroads undermined silver’s role.
- What killed silver as money after the Franco-Prussian War?
- Why did the Hunt brothers’ attempt to corner silver fail?
- How did the Byzantine solidus maintain stability for 1,000 years?

- Why is the 19th-century gold standard seen as a high point in monetary history?
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TL;DR

Metals became money because they were durable, divisible, and portable. Gold emerged as the hardest money due to its indestructibility and high stock-to-flow ratio, while silver fell behind once banking allowed paper substitutes to replace small-denomination coins. The Franco-Prussian War sealed silver's demonetization, leaving gold as the global standard. History shows civilizations flourish with hard money and collapse with debasement. Gold was the best monetary technology before Bitcoin — which improves on it with built-in difficulty adjustment and incorruptibility.
