The Geodesic Economy, Internet Bearer Transactions, and Yet Another “Stateless” Currency

A Rant
by
R. A. Hettinga, Chairman/CEO,
The Internet Bearer Underwriting Corporation

What’s a Geodesic Network?

• Peter Huber: “The Geodesic Network”, 1986
• The Economics of Networks:
  – Lines cheaper than nodes: Hierarchical
    • Operator switched networks...
  – Nodes cheaper than lines: Geodesic
    • Moore’s “law” drops switching by 1/2 every 18 mos
    • Bucky Fuller: “Straightest line across a sphere”
    • The mother of all geodesic networks...
What’s a Geodesic Economy?

- Hierarchical networks create hierarchical societies
  - Nomads to Cities to Empires to Nation States to Superstates
  - Proprietors to Partnerships to Corporations to Multinationals-Kieretsus-Zaibatsus
- Geodesic networks create geodesic societies
  - Mainframes to minis to micros to swarms
  - The depression (farms to mfg), various recessions (mfg to knowledge)

What’s a Geodesic Economy?

- The internet is the mother of all geodesic economies
- Geodesic Economies need Geodesic Payment
  - Hettinga’s 3 rules for internet financial operations
    - Geodesic (peer-to-peer) Payment
    - 3 orders of magnitude cheaper than the thing
    - Nothing but net (TCP/IP or go home)
What’s a Bearer Transaction?

• Okay, so you know the difference between bearer and book-entry…
  – The book-entry / bearer distinction very old
  – Clay promises and Grain Banks, Tally sticks and Italian Monks
  – Telegraphy, Mainframes, and ubiquitous book-entry
• Physical (Bearer) Delivery is dead
  – My Brinks to your Cage costs too much

What’s a Digital Bearer Transaction?

• Cryptography
  • Diffie & Hellman; Rivest, Adleman and Shamir
  • Geeks vs. Spooks; Geeks vs. Cops
  • Financial Crypto is the Only Crypto that Matters
• Financial Cryptography
  • Signature Protocols: Chaum, Brands, Wagner
  • Unsigned Protocols: Millicent, Mocomint, etc.,
  • Geeks vs. Banks: Digital Bearer Protocols will be the only Financial Cryptography that matters...
What’s a Digital Bearer Transaction?

• “The Geodesic Economy” FTVFR column
  – Pick an instrument, there’s a bearer FC protocol
    • Cash, Debt, Equity, and, yes, derivatives
    • From $10^9$? To $10^{-6}$?
  – Digital Bearer Transactions are, guess what,
    • Geodesic
    • 3 orders of Magnitude Cheaper
    • Nothing but Net

The Plug: What’s IBUC?

• The Internet Bearer Underwriting Corporation
  • Internet:
    – Nothing but Net. “Inside Out”. IP or go Home
  • Bearer:
    – Digital Bearer Financial Cryptography Protocols
  • Underwriting:
    – We underwrite internet transactions
    – We assume the (technological/financial) risk of same
The Plug: What’s IBUC?

• Strategy:
  • Replace insecure book entry transactions on secure private networks with secure digital bearer transactions on insecure public networks
    – Yes, all of them, or at least with book-entry’s current penetration
  • Walk in the front door
    – Yes, they’re anonymous, but cost matters more than privacy
  • Obey all laws everywhere…
    – “Render unto FinCEN”, and all that...

The Plug: What’s IBUC?

• Tactics:
  – Streaming cash for streaming media
    • Millidollar transactions using MicroMint
    • ATM withdrawal, 85bp one-time front-end load
    • Unlimited transactions, free deposit
    • Yes, we can make money, more important, so can the merchant.
  – Blind signatures for *storage*
    • Yes, you can spend them, but what on, just yet?
Right. What’s a “Stateless” Currency?

• While we’re pitching each other our protocols, here…

• Gene Fama, Fisher Black, and the “new” monetary economics
  – Why keep currency when you can keep assets with a return?
    • You need lots of computers, you need lots of

• Ian Grigg, Mark Tenney
  – “If I can get an S&P backed digital bearer instrument, who needs money”

• Paul Harrison
  – If we can hold digital bearer title to *anything*, even
    • Stuff in transit (bills of lading)
    • Stuff in warehouses (wearhouses)
  – Who needs the CPI?
Right. What’s a “Stateless” Currency?

• A true index-based currency
• Any one can issue it
• Emil Lizardo in Buckaroo Bonzai
  – The ganglia twitch…

Thank You

– Robert Hettinga
  • <mailto:rah@ibuc.com>
– The Internet Bearer Underwriting Corporation
  • <http://www.ibuc.com> (what there is of it)