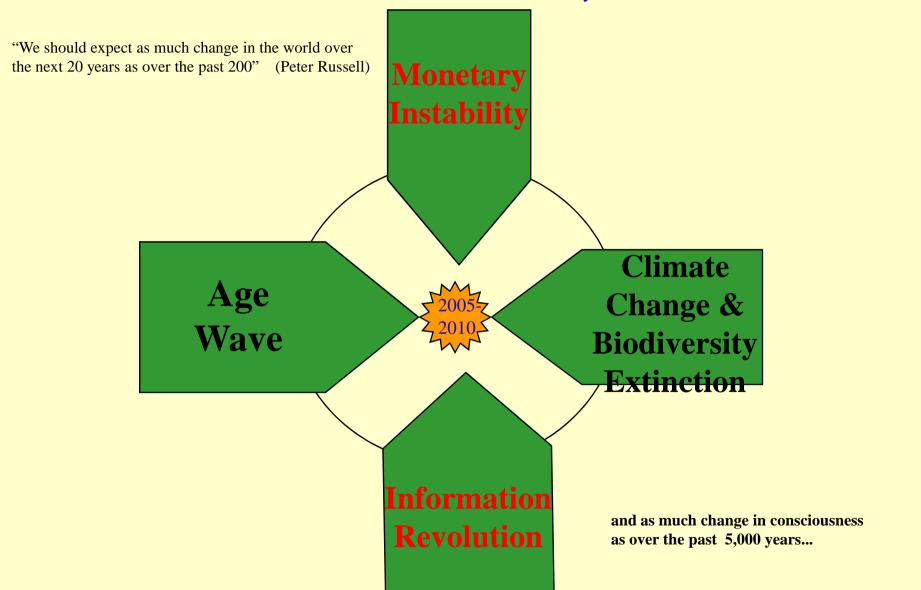
#### Innovative Strategies for Financing Full Employment



#### From "Future of Money" (1999)

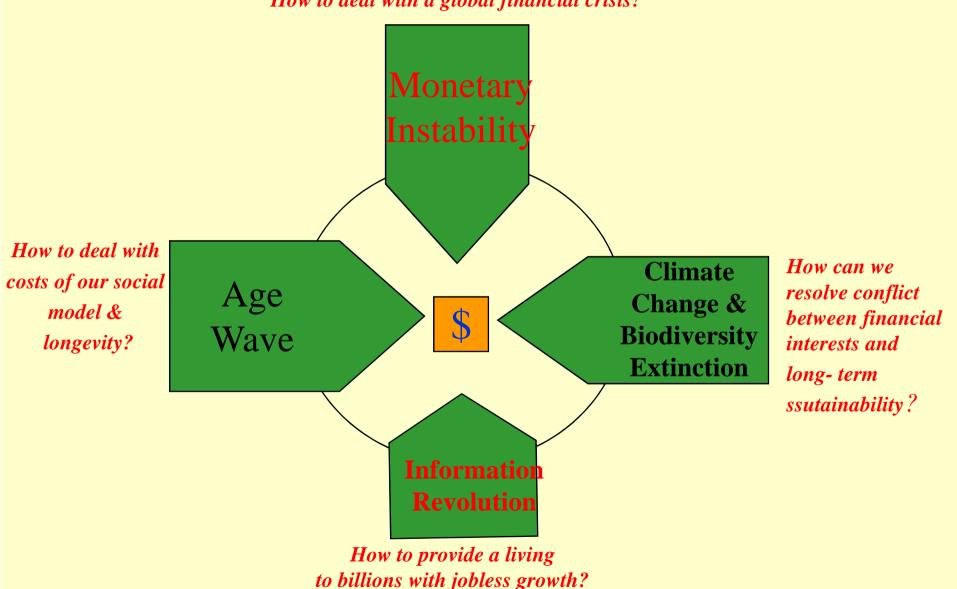
#### The Time Compacting Machine

Four powerful human-created mega-trends converge within 10 years, and need to be resolved within 20 years

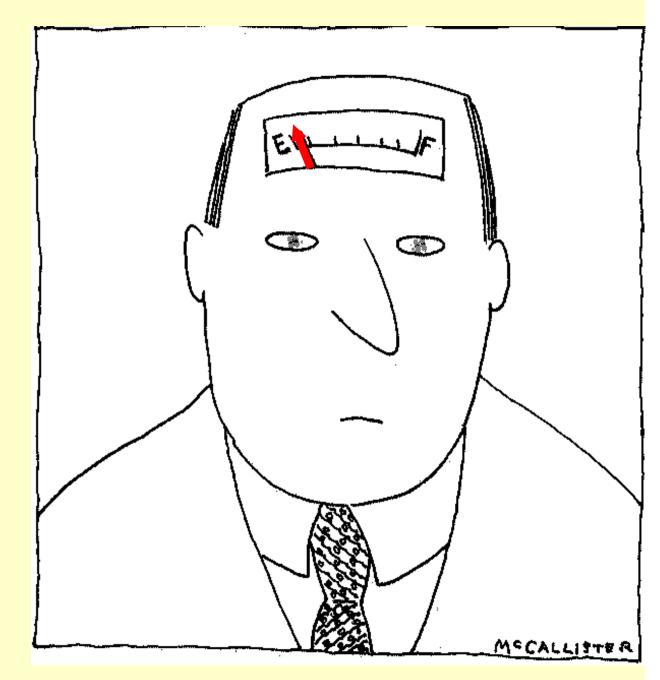


### From "Future of Money" (1999) Money at Core of Time Compacting Machine

How to deal with a global financial crisis?



Solutions within existing money paradigm are running on "empty"

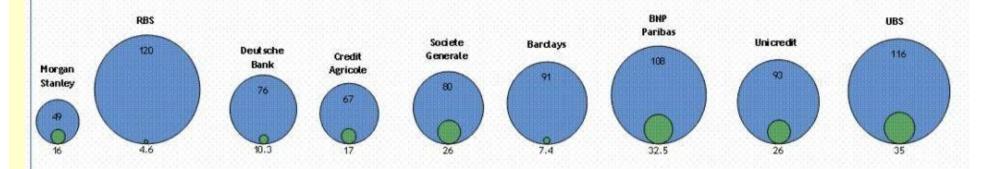


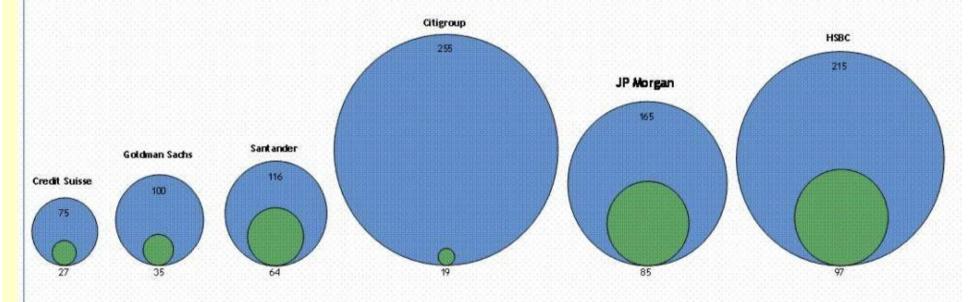


"Never, ever, think outside the box."

#### Banks: Market Cap

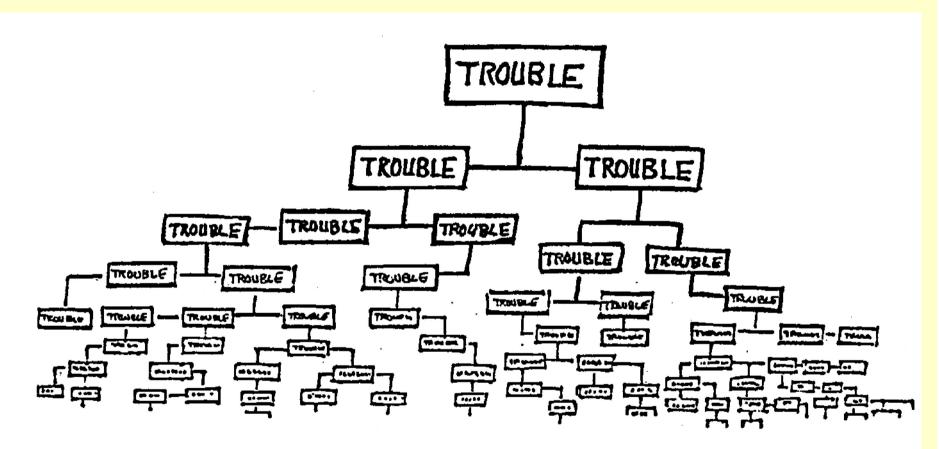
- Market Value as of January 20th 2009, \$Bn
- Market Value as of Q2 2007, \$Bn





J.P.Morgan

#### In short, our global financial system is in...



Why didn't any policy makers, no mainstream media and only very few academics see the crisis coming?

### Plan

- Blind Spots
- Systemic Cause
- My Proposal
- Conclusions

### **Blind Spots**

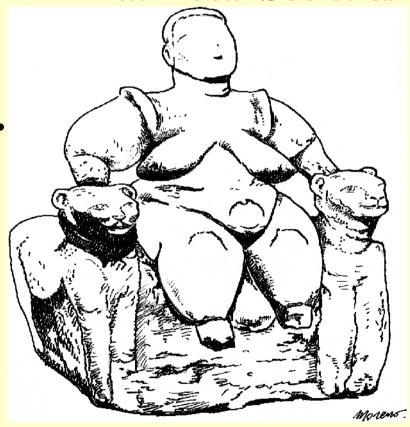
- Is monetary blind spot due to
  - Historical Habit?
  - Ideological Polarization?
  - Academic Taboo?
  - Lobbycracy?
- Convergence of all the above...

# Historical Habit Patriarchal vs. Matrifocal Monetary Systems

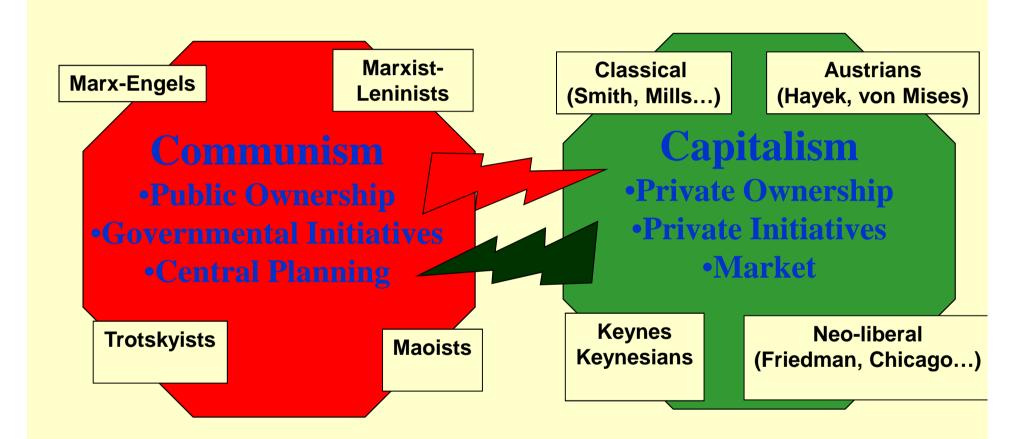
Patriarchal Societies



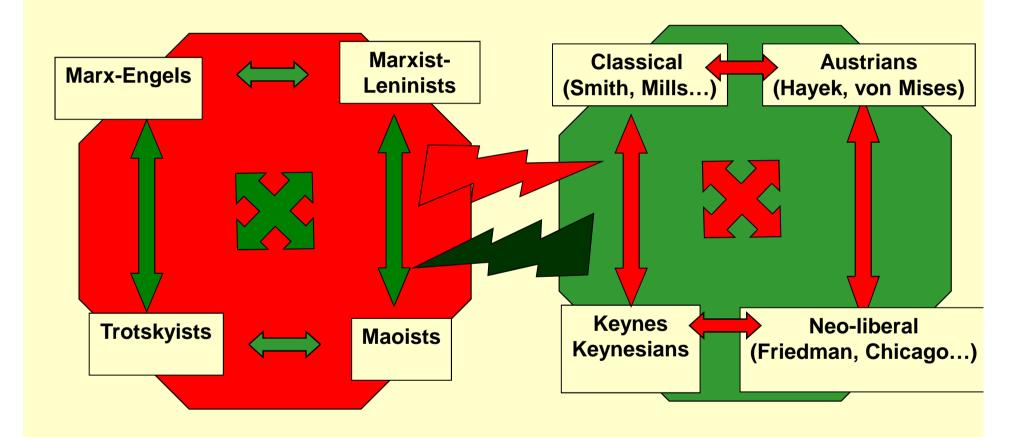
• Matrifocal Societies



## Ideological Polarization until 1990s

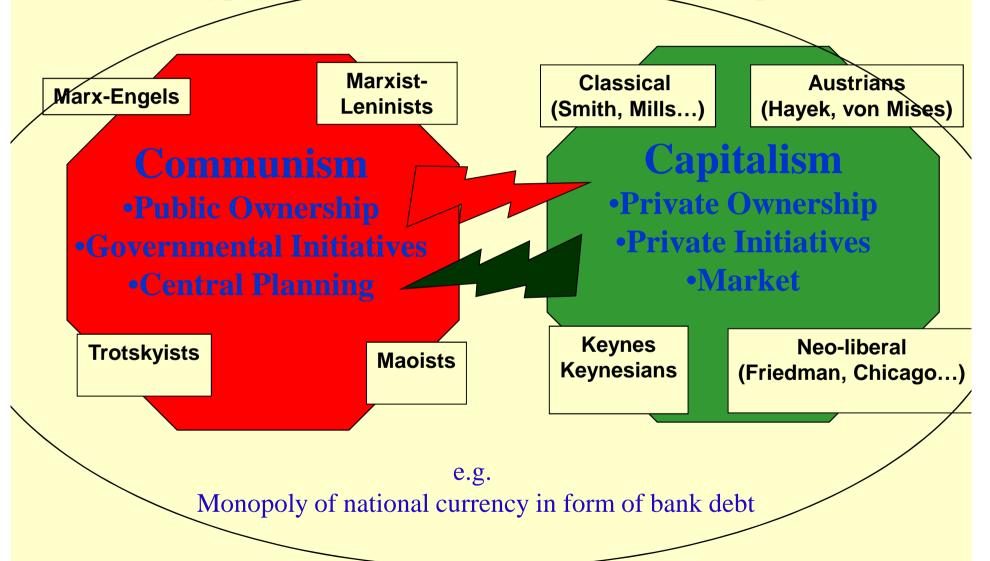


### Ideological Blind Spot



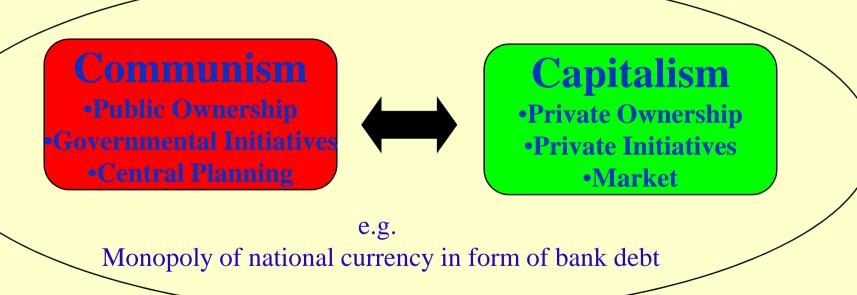
#### Ideological Polarization of Cold War

Hypotheses Common to all become blind spots...

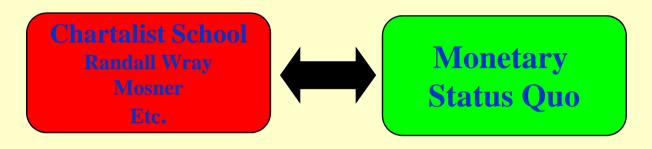


## Blind Spot Ideological Polarization of Cold War

Common Hypotheses to both poles become blind spots...



### Blind Spot Academic Taboos



- Chartalist School shows that
  - •Need for balanced budgets was valid only under gold standard...
  - •Under floating exchanges, governments can spend money into existence guaranteeing
    - •Full Employment
    - •No inflation
- Difference between Nobel Prices for Economics & other five Nobel prizes?
  - •"Never touch the money system"

### Plan

- Blind Spots
- Systemic Cause
- My Proposal
- Conclusions

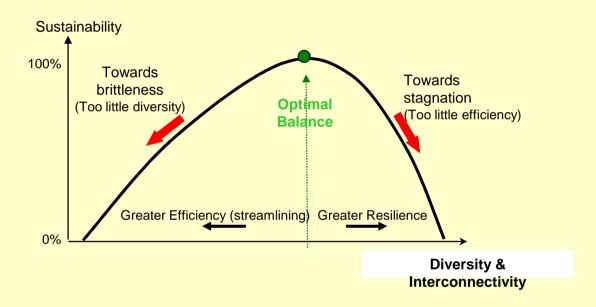
### Symptoms of Systemic Cause?

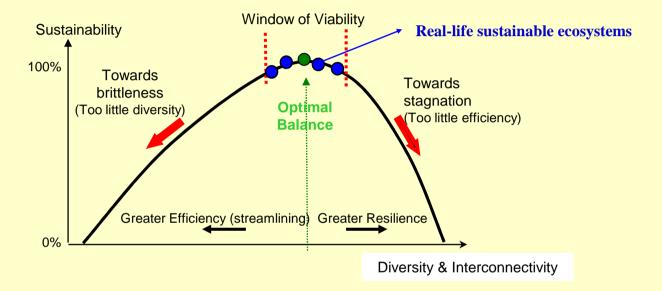
- This is the biggest but not the first such crisis
  - World bank identified 96 banking crises and 176 monetary crises in recent 20 year period
  - Such crises are a remarkably "hardy perennial" (Kindleberger)
    - 48 well documented major crashes between 1637 and 1929.
  - Happened under very different regulatory systems, at very different times, in different countries, at different development levels...
- My claim: financial system is *systemically* unstable
  - "An accident waiting to happen" explains also why huge efforts by very bright and dedicated people (in central banks and private financial system) repeatedly fail to avoid crashes...

### Complexity Theory

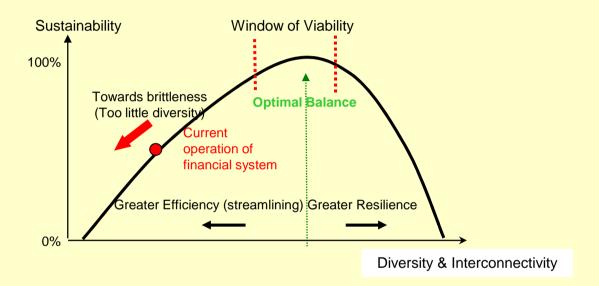
- Robert Ulanowicz: 25 years of quantitative modeling of real-life ecosystems using complexity, information and network theory
- Key finding: Sustainability of any complex network system is measurable with a *single metric* in terms of optimal *balance* involving 2 key variables "*efficiency*" and "*resilience*"
  - Which in turn are a function of 2 structural variables: diversity and interconnectivity
- NB: efficiency and resilience are emergent properties from a network structure are independent from *what* is being processed: *biomass* in an ecosystem, *electrons* in electrical circuit, *money* in an economy...

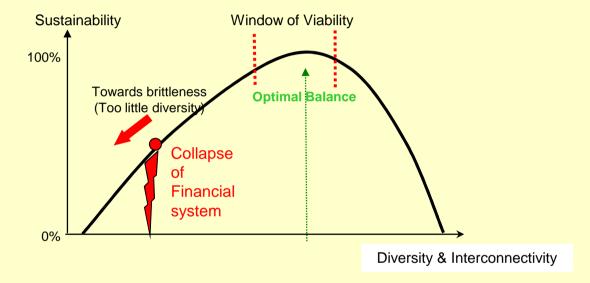
### Sustainability in Natural Ecosystems





### Application to Monetary System

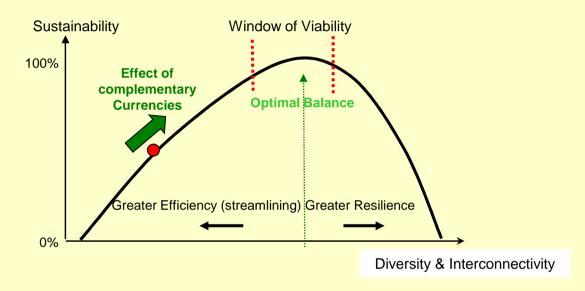




### Plan

- Blind Spots
- Systemic Cause
- My Proposal
- Conclusions

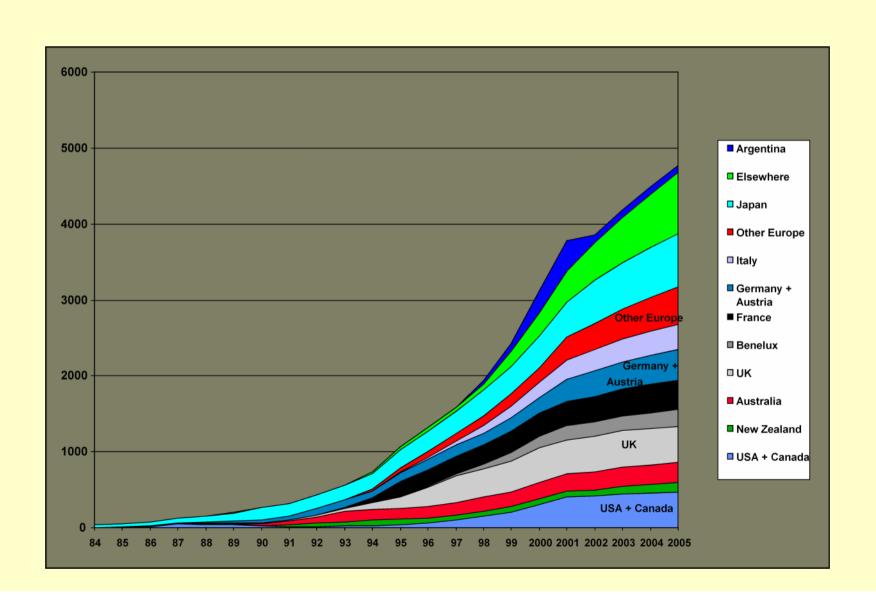
### Systemic Solution



### Systemic Solution

- Fact: monopolies of official currencies as medium of exchange have already died
  - Hundreds of thousands commercial loyalty currencies (e.g. miles, "points Carrefour", etc.)
  - 5000 social purpose complementary currencies operational
  - They all are linking unmet needs with unused resources
- Part of worldwide evolution from industrial to information development model

#### **Number of Social Purpose Complementary Currencies**



### One Example: Regios in Germany





#### Welcome to Time Dollars!



A new kind of money for rebuilding the Core Economy of family, neighborhood and community

#### Getting Started

An Intro: What Are Time Dollars? How do they work? Who uses them? Stories From Time Dollars

#### Time Dollars in Community

Time Dollars In Community The soul of Time Dollars is here! TD's Across the Nation & Overseas Time Dollar's "extended family"

#### Values, Theory and Justice

The Values at the Heart of Time Dollars Theoretical Framework Time Dollars as a Force for Social Justice

#### Catch Time Dollars in The News!

Time Dollar News & Views Bi-weekly ABC News -- TimeBanking in China NPR Jan 17, 2001, on TimeDollars The Time Dollar Newsletter TimeBanks-UK Newsletter Articles from Magazines, Journals, Newspapers

#### Create Your Own...

How To Begin/Run a Time Dollar Program Join the Time Dollar E-group Time Dollar Materials Order Form

#### Contacts and Links

Time Dollar White Pages Links to Other Sites Contact Us

### http://www.ithacahours.org/









## Fureai Kippu "Caring Relationships Tickets" in Japan



478 systems operational in Japan 2 national electronic clearing-houses

YAMATO LOVES





## My Own Proposals (1) Social Purpose Currencies

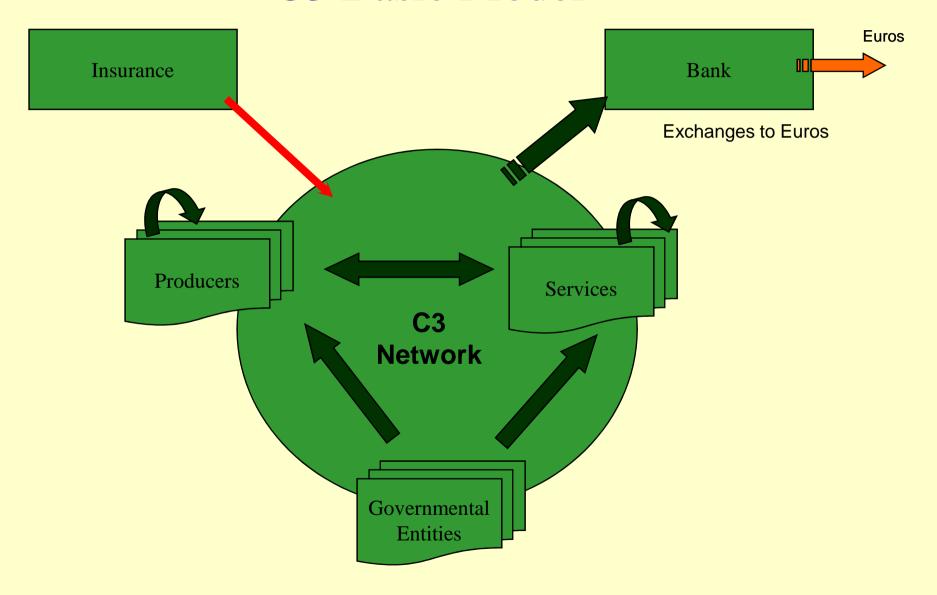
- Introduce integrated payment system for an ecology of social purpose currencies
- Flanders pilot project on-going in Ghent, Belgium
  - Objectives:
    - Induce desirable behavior change while respecting democratic process
    - Obtain more social results with same Euro budget
  - 3-5 social purpose currencies with Belgian ID card + mobile phone
    - Elderly care currency
    - Carbon-reducing currency
    - Learning currency
  - Pilot operational in 2010
  - Generalization to Flanders in 2011-12

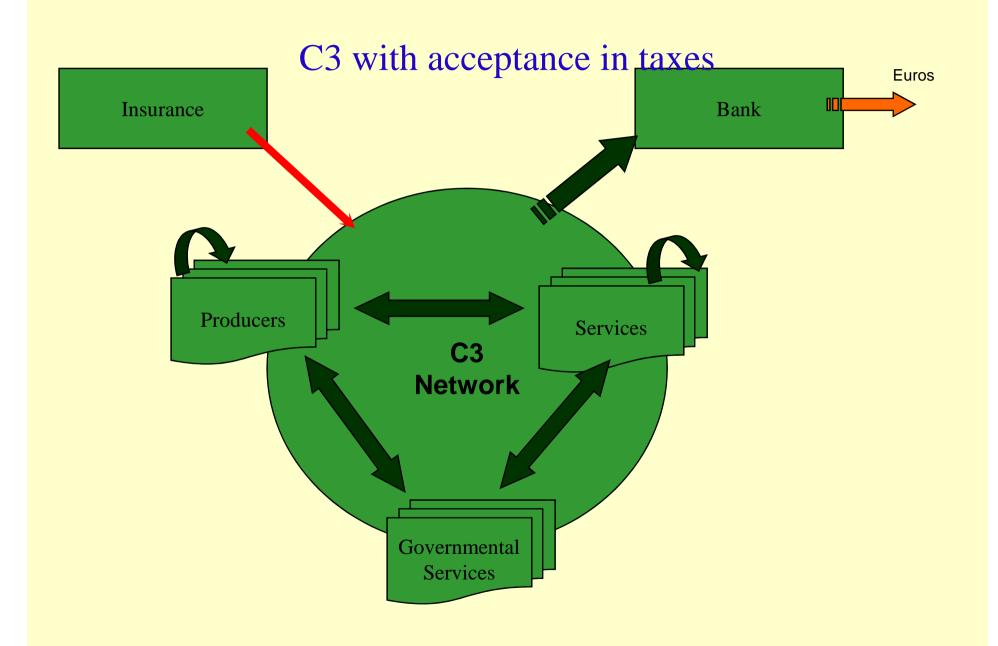
### My Own Proposal (2)

#### B2B currency: Commercial Credit Circuits (C3)

- Objective: *Systemically* counteracts *unemployment* explosion by providing innovative bridge financing for Small and Medium Sized Enterprises (SMEs)
- Problem: SMEs are pressured to pay quickly (e.g. 30 days)
  But get paid slowly (e.g. 90 days)
  Banks uninterested in providing bridge financing
- Solution: Invoices are insured before being accepted in C3 payment system, until payments due in conventional national currency either by issuer or by insurance company
- Each recipient of a C3 has two options:
  - Exchange into conventional national currency at a cost
  - Pay own suppliers without cost
- Operational in Uruguay and Brazil, approved by Central Bank and IDB.
- Accepted in payment of all taxes and services by government in Uruguay.

#### C3 Basic Model





#### The Choice





Sticking to Monetary Status Quo

Or embracing Information Age Money

NB: Complementary Currencies are now where Open Source software and Microfinance were 10 years ago...

#### Plan

- Blind Spots
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## A Choice to Make for Europe





Sticking to Monetary Status Quo

Or embracing Information Age Money

NB: Complementary Currencies are now where Open Source software and Microfinance were 10 years ago...

## Thank You!



## Follow up

- www.lietaer.com
  - White Paper on Options for Managing Systemic Banking Crises
  - C3 Proposal.
  - Technical Documents backing this approach
- B. Lietaer "Future of Money"
- B. Lietaer "Mysterium Geld" for historical evidence
- Email contact: blietaer@earthlink.net

## Options for Managing Banking Crises

Approach	Bankers	Taxpayers/ Central Governments	Local Governments	2d Wave	Systemic Cause
Conventional  Nationalizing  Problem Assets	Preferred	Most Expensive (no leverage)	Unaddressed	delayed	Unaddressed
Nationalizing Banks	Equity Dilution	10x leverage	Unaddressed	delayed	Unaddressed
Unconventional  Nationalizing  Money Creation	End of current business model	LT solution (but inflation?)	Unaddressed	Governments spend money into existence	Unaddressed
Complementary Currencies	End of monopoly of money creation	LT solution	LT & ST solution	LT & ST solution	Systemic Solution

#### Role of EU in the Crisis?

- Risk of Unraveling of EU economic integration during this crisis...
  - Banks were saved by nation-states with EU playing only secondary coordination role
  - Idem with automobile industry (and upcoming next big business sectors: steel?)
- EU role in reducing job crisis through SMEs?
  - EU level institution makes offer to Regions to provide 1/3 of invoice guarantee at condition to keep emergency systems compatible
  - Regions provide second 1/3
  - Private insurance companies final 1/3

#### Relevance

- Important because monetary system is the meta-system controlling all other systems in our society
  - Business
  - Governments
  - Academics
  - Majority of all individual activities
- "If Americans understood money and banking, there would be a revolution the next day." Henry Ford

## Why Save the Banks?

- Lesson from the 1930s: "2d Wave" Crisis
  - When many banks bankrupt at the same time they trigger a "2d Wave" recession in the "real economy"
  - Reason: banks stop financing "real economy"
    - Banks have monopoly of issuing legal tender
    - => Strangulation of all other economic sectors
- Consequence: "Moral Hasard":
  - "Too Big to Fail" banks take high risks
  - If profitable => private winnings
  - If failed => governments will bail them out…

# US Taxpayer's Commitments... So Far

• Total commitment for financial bailout 2008: \$4.616 trillion dollars.

Louisiana Purchase: Cost: \$15 million, Inflation Adjusted Cost: \$21billion Marshall Plan: Cost: \$12.7 billion, Inflation Adjusted Cost: \$115.3billion NASA: Cost: \$416.7 billion, Inflation Adjusted Cost: \$851.2 billion Race to the Moon: Cost: \$36.4 billion, Inflation Adjusted Cost: \$237billion S&L Crisis: Cost: \$153 billion, Inflation Adjusted Cost: \$256 billion Korean War: Cost: \$54 billion, Inflation Adjusted Cost: \$454 billion The New Deal: Cost: \$32 billion (Est), Inflation Adjusted Cost: \$500billion Invasion of Iraq: Cost: \$551b, Inflation Adjusted Cost: \$597 billion Vietnam War: Cost: \$111 billion, Inflation Adjusted Cost: \$698 billion TOTAL: \$3.92 trillion

• Costs of World War II borne by the US is the only example of a comparable cost: \$288 billion, inflation adjusted \$3.6 trillion.

# European Governmental Guarantees

- Guarantees provided by European governments are also without precedent
- Assets of 3 largest banks in the following countries (as % of GDP):

_	Germany	130%
_	Italy	142%
_	Portugal	147%
_	Spain	218%
_	Ireland	253%
_	France	257%
_	UK	317%
_	Netherlands	409% (2 biggest banks)
_	Belgium-Luxemburg	528%
_	Switzerland	773% (2 biggest banks)
_	Iceland	1,079% (first country to go bankrupt)

#### Role of EU in the Crisis?

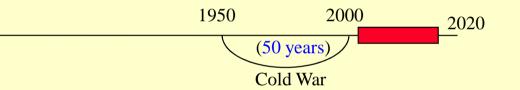
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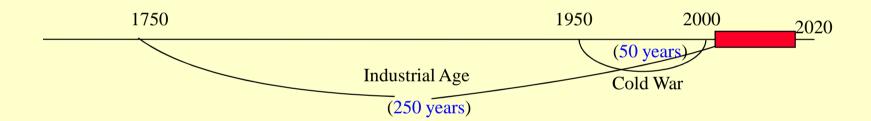
## My Proposal

- While banks can't fulfill their funding role at appropriate levels, have *local and states* accept *partial* payment of taxes in *selective* and *robust* complementary currencies
  - Start with robust B2B currencies (because best auditable)
  - Implement WIR type systems…
- Complementary currencies are useful to solve problems even without any crisis
  - Over time, local and state governments can encourage them in other ways than acceptance in taxes in the future

## Systemic Solution #2 Ending Monopoly of Bank-debt money

- Governments (central and/or local) accept in *partial* payment of taxes carefully *selected* complementary currencies (other than bank-debt money).
  - Complementary currencies could be those created by local governments, or by corporations (b2b such as WIR, Terra), or even local non profits (social purpose currencies).
  - Very flexible (choice of currency, time, percent accepted, etc.)
  - Example of partial precedent: Russia accepted payment of taxes in copper during rubble crisis.
- Doesn't end privilege of bank-debt money as legal tender, only temporarily their monopoly...
  - Doesn't end the banks' business model
  - Complementary currency management can in fact be a new banking service
- Criticism: less efficient...but that is exactly what is needed

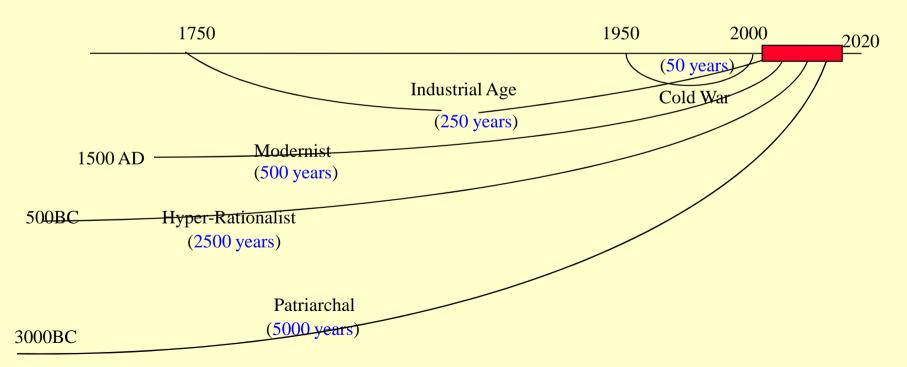


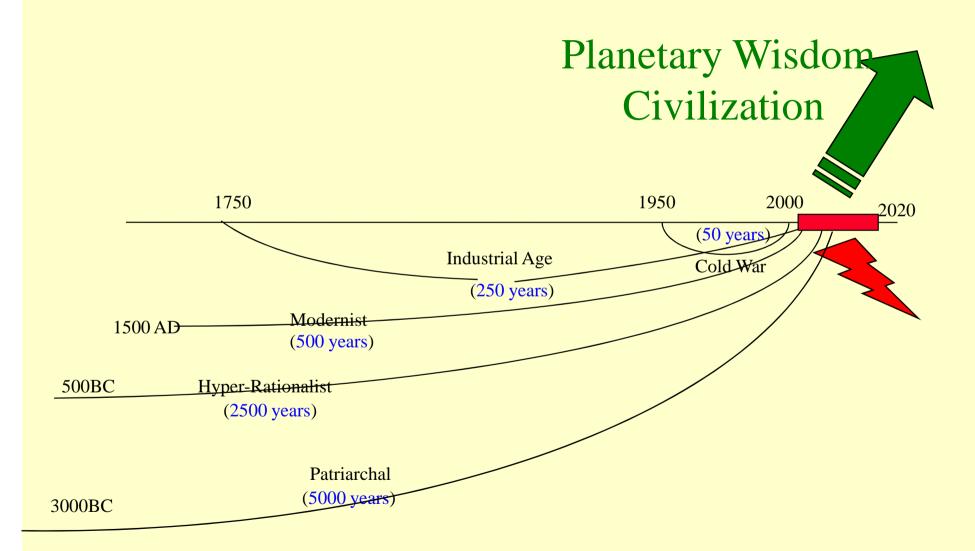


Longer waves embrace, direct and feed shorter ones...

What ties these "waves" to today's crisis?

#### Answer: "Patriarchal Money System"





#### Conclusions

- Re-regulation is necessary and will be on everybody's agenda, but it can only make such crises less frequent, not eliminate them.
- We can do better than in the 1930s
  - but only if we consider systemic options...
- The systemic option of complementary currency is
  - within the political decision power of local and state governments
  - An acceptable compromise for banking system?