

# The Future of Digital Money

*Electronic money and Complementary Currencies*

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## Central Ideas

1. Everybody knows that electronic currencies is changing the *form* of our conventional national currencies (smartcards, e-purses, etc).
  - More important: it also is creating *new kinds of currencies*.
2. Four Mega-trends will provoke growing crises over the next twenty years that will oblige us to review our agreements about money
  - Not theory: over 4000 complementary monetary experiments are already under way around the world...
3. Complementary Currencies do not *replace*, but *complement* the functions of conventional currencies.
  - They create also *new opportunities* for payment innovators.

# Plan

The Time Compacting Machine

The Money Opportunity

Fighting the Trend

Riding the Trend

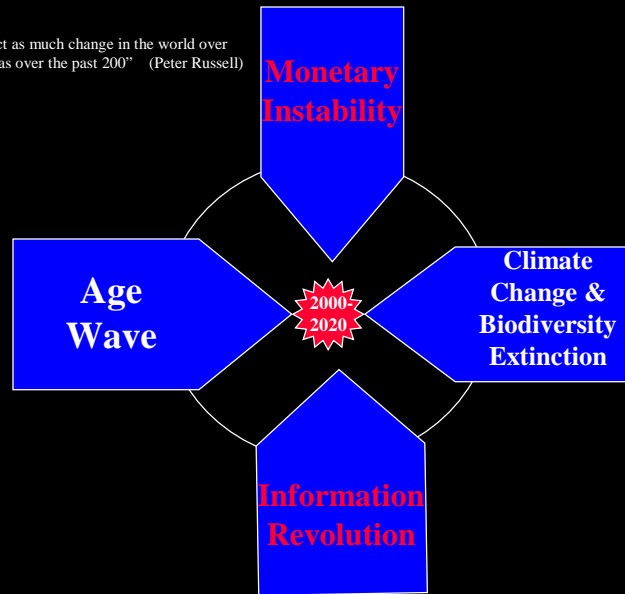
Conclusions

## The Time Compacting Machine

Four powerful human-created mega-trends converge over next 20 years

Each will be synthesized in a “*money question*” which will *need* to be resolved before this deadline.

“We should expect as much change in the world over the next 20 years as over the past 200” (Peter Russell)



# Monetary Instability

## \$2 trillion traded in foreign exchange markets every day

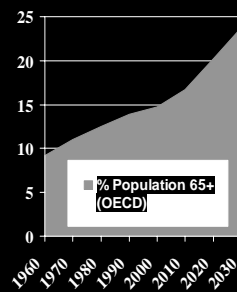
- 100 times more than the trading volume of all the stockmarkets of the world combined
- Only 2% of these foreign exchange transactions relate to real goods and services
- 98% is purely speculative

=> Foreign exchange crises in Mexico in 1995, Asia in 1997, Russia in 1998 and 87 other countries (World Bank)

=> Who is next?



# The Age Wave



- 66% of all human beings who ever reached the age of 65 are alive today
- Unfunded pensions liabilities now **\$3.5 Trillion** in the OECD countries alone
  - four times the GDP of the USA
  - add healthcare and double that number
  - Even before acceleration in percentages of elderly ...



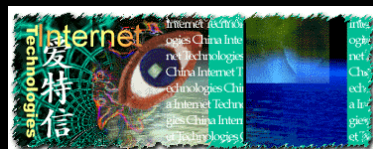
# Bio Diversity and Climate Change

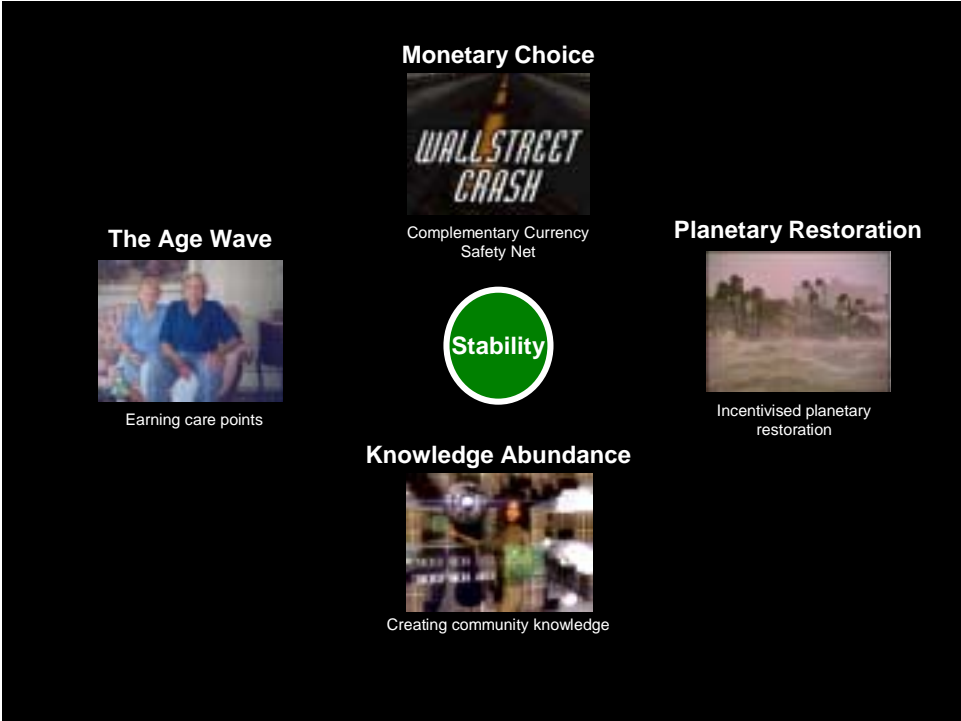
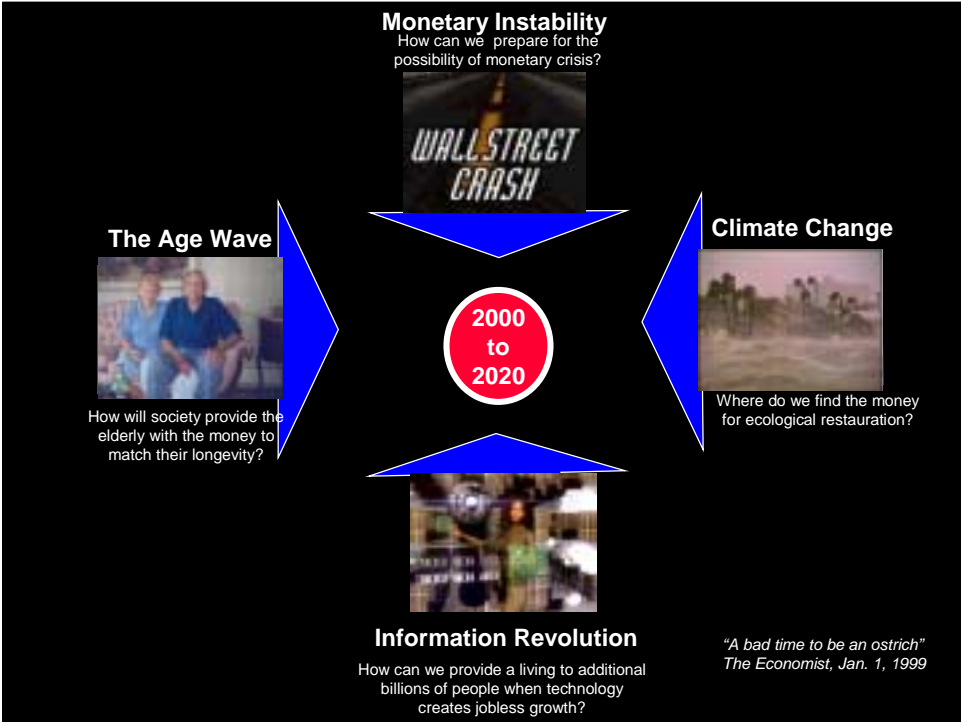
- 85% of all insurance payments worldwide compensate natural disasters
- 4 times more people die in natural disasters than in all war and civil disturbances combined
- 1998 survey: 69% of professional biologists say we're in 'sixth extinction'
  - we are in the process of losing 30%-70% of the planet's biodiversity by 2030 due to the actions of humanity!



# Information Revolution

- Computing
  - 1940's, Thomas Watson predicted world market for 'maybe five computers'.
  - 1975, 50,000 were operating
  - 1997, >140 million
  - 2002, >800 million
- Since 1980, the World 500 increased production and sales 700% whilst reducing total workforce
- **Problem: jobless growth** => today 700 million to 1 billion chronically unemployed worldwide => global job scramble
  - “Today's scramble for jobs will in 20 years look like a fight for deckchairs on the Titanic” William Bridges





## Plan

- The Time Compacting
- The Money Opportunity
  - Emergence of Social Complementary Currencies
  - Re-aligning Financial Interests with Long-Term Sustainability
  - Overall Implications
  - Three Practical Findings
- Fighting the Trend
- Riding the Trend
- Conclusions

## Emergence of Social Complementary Currencies

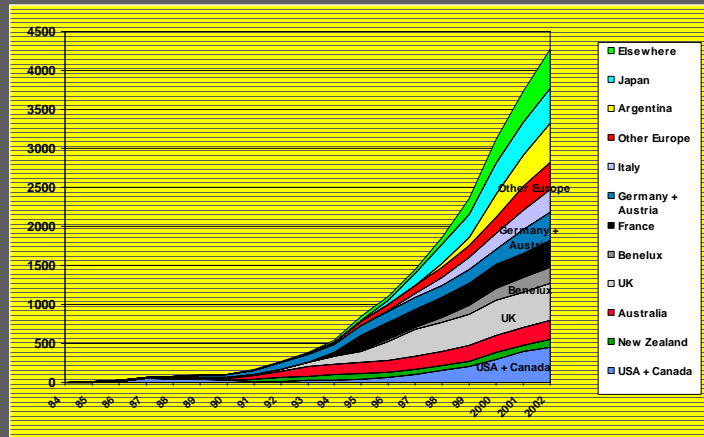
Crises => **Win/Win opportunities to resolve all four “money questions”** with specialized monetary innovations.

- Complementary currencies do not challenge legal tender status of national currencies
- Win/Win strategy includes new opportunities for the financial services

1. Japan addresses **elderly** care crisis with 350 Healthcare currency systems since 1995. China started the same last Summer...
2. Over 2000 complementary currency systems create local **work** in over a dozen countries (Time Dollars, LETS, Ithaca HOURS ).
3. **Eco-money** projects creating work by preventive actions against ecological disasters
4. Together these **complementary currencies** can provide **safety net** under conventional monetary system.

## Today's Situation

### Number of Complementary Currency Systems Operational in 12 countries (1984-2002)



**Timedollar**

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

**Catch Time Dollars in The News!**  
 Time Dollar news & views: BI-weekly  
 ABC News — TimeBanking in China  
 NPR Jan 17, 2004 on TimeDollars  
 The Time Dollar Newsletter  
 TimeDollars-UK Newsletter  
 Articles from Magazines, Journals, Newspapers

**Time Dollars in Community**  
 Time Dollars in Community  
 The soul of Time Dollars is here  
 IT'S Across the Nation & Overseas  
 Time Dollars' "extended family"

**Create Your Own...**  
 How To Begin/Start a Time Dollar Program  
 Join the Time Dollar Program  
 Time Dollar Materials Order Form

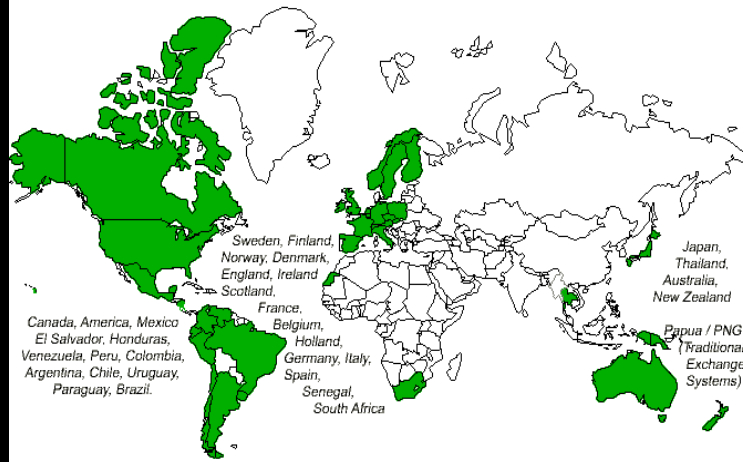
**Values, Theory and Justice**  
 The Values at the Heart of Time Dollars  
 Theoretical Framework  
 Time Dollars as a Force for Social Justice

**Contacts and Links**  
 Time Dollar Info Pages  
 Links to Other Sites  
 Contact Us

<http://www.ithacahours.org/>



### Countries with Community Currency Systems



Complementary currencies today = Wright Brother aeronautics ?

## Three Practical Findings

1. In the field of complementary currencies, **practice is ahead of theory**
  - “A fact is a fact, and more respectable than the Lord Mayor of London”
2. Contrary to key economic theory hypothesis assumed by Adam Smith, **money is *not* value neutral**
  - Different types of money encourage different types of transactions, and different relationships between people
3. Complementary Currencies solve social problems **without taxation** or governmental bureaucracies
  - Dampens shocks to social/political system from economic/monetary instabilities
  - Creates a more stable, predictable and “gentler” world

## Plan

- The Time Compacting Machine
- The Money Opportunity
- Fighting the Trend
  - Lessons from the Past
  - Lessons from the Present
  - Lessons for the Future?
- Riding the Trend
- Conclusions

## How should business/banks react?

- Riding the trend
  - Taking it into account in business plans
  - Using it in payment competitive strategies
    - Precedent: Citibank's use of Frequent Flyer Miles as incentive to use its Visa card
- Fighting the trend
  - Ignoring it
    - => Leaves open space to new payment service providers (Telcos, supermarkets)
  - Fighting it
    - => Ex: trying to protect (already lost) monopoly of national currencies
- Key Unresolved Question: What are the alternative solutions to the Megatrends?

## Lessons from the Past?

- Banks have successfully lobbied in 1930s to eliminate Complementary Currencies
  - Social consequences: no local solutions to rising unemployment
  - Political consequences: "Saviours" get elected called the Central Government, the Fuhrer, the Duce, Milosevic, Le Pen, Fini
- The only really effective way for large-scale centralized approaches to reduce serious structural unemployment is to prepare for war. Such economic reasons for war have been found not only for World War II, but many others ...



## Lessons from the Present

“The majority of urban rioters – independently of the country involved – have a common profile:  
they are youth which has given up on finding a job in the brave new world of the Information Age.”

*Lois Wacquant, French Sociologist*

## Lessons for the Future

- We have a history of narrowly perceived interests blocking broad systemic solutions
- We now have the technologies – monetary and otherwise – to create a Sustainable Abundant world
- It is the sum of our individual choices that will decide for our future: what do *you* choose?

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## Conclusion

### Win/win Solution

- The four Megatrends will exacerbate societal problems over next twenty years.  
⇒ Who has better solutions?
- “Gentler World” is possible with available technologies, monetary and other...
  - *Sustainability* a realistic global objective?  
⇒ “No planet, no business”

## Win/win Solution (2)

### Benefits to Business and Banking Sector

- Complementary Currencies operate in countercycle with boom/bust cycle:  
=> *less instability in jobs, politics, business and banking portfolios*  
NB: IFO quantitative study on impact on global economy...
- These new Currencies are **Complementary**:
  - Do *not* displace any services existing today in conventional currencies (savings, financing, etc.)
  - But create opportunities for *additional* services.

## Follow-up

- White Paper “The Future of Payment Systems” available free of charge if you leave business card at Registration Desk
- Book “*The Future of Money*” (Random House, 2001)  
[www.amazon.co.uk](http://www.amazon.co.uk)
- Also available in German, Japanese, Dutch, Danish, Chinese. Other languages in preparation
- Internet:
  - English website: [www.transaction.net/money](http://www.transaction.net/money)
  - German website : [www.futuremoney.de](http://www.futuremoney.de)
  - Email: [blietaer@earthlink.net](mailto:blietaer@earthlink.net)