## Rethinking Money

Designing a money systém sensitive to the environment

### What is Money?

Functional Definition – what money does

Money is a:

- Medium of exchange
- Measure of value/unit of account
- Store of value

#### These roles may be incompatible

- Amongst money's many functions, that of the lubrication of a fully functioning economy is the most basic
- If some people are storing money then it may not be able to lubricate the economy efficiently
- Speculation can mean that money is sucked out of the local economy to areas of the world where it can attract a higher rate of return as investment capital

### Theory: the money multiplier

"Reserve ratio" of 10%; money multiplier is the reciprocal of this, i.e. 10

- An initial deposit is made of £100
- The bank lends £90 of this and holds £10
- The borrower uses the £90 to pay for work and it is deposited in the workerś account
- Now customer balances have increased by the original £100 plus the £90 from the new cheque deposits: a total of £190
- The bank can now lend 90% of the £90, a further £81.
- ◆ Total deposits are now increased by another £81 to £271
- This process repeats and the total increase in bank deposits is 10 times the amount initially deposited: i.e. £1,000

#### Myth no. 1: the fractional reserve

- Bank creation of money is not controlled by some set ratio—only 'prudence'
- The constraint on bank lending is only a willing supply of borrowers
- When there are no more borrowers the systém collapses
- Quantity of money is not related to economic activity

### Myth no. 2: money has "backing"

- Most money is "fiat"
- Banks do not hold gold and neither to governments
- The agreement in 1944 was that the dollar would be backed by gold
- ◆ This link was broken unilaterally in 1971

### Myth no. 3: money is neutral

- Most economic activity is based on borrowed money
- The money that is deposited belonged to somebody with excess money
- The person who borrowed it has insufficient money
- Interest will transfer money from the working person with less money to the person living from unearned income

### Money and globalisation

- The finance industry lies at the heart of globalisation. Of the total international transactions of a trillion or so dollars each day, 95 per cent are purely financial. Globalisation in not about trade; it is about money.
- the financial system now completely dominates the real economy of goods and services
  - Mellor et al. The Politics of Money, 2002

#### The "credit crunch"

- The supply of borrowers ran out
- Many existing loans had been made without good collateral and could not be repaid
- Bank nominal assets were inflated way beyond their actual assets
- All financial institutions were seeking cash and it was sucked out of the real economy leading to Recession

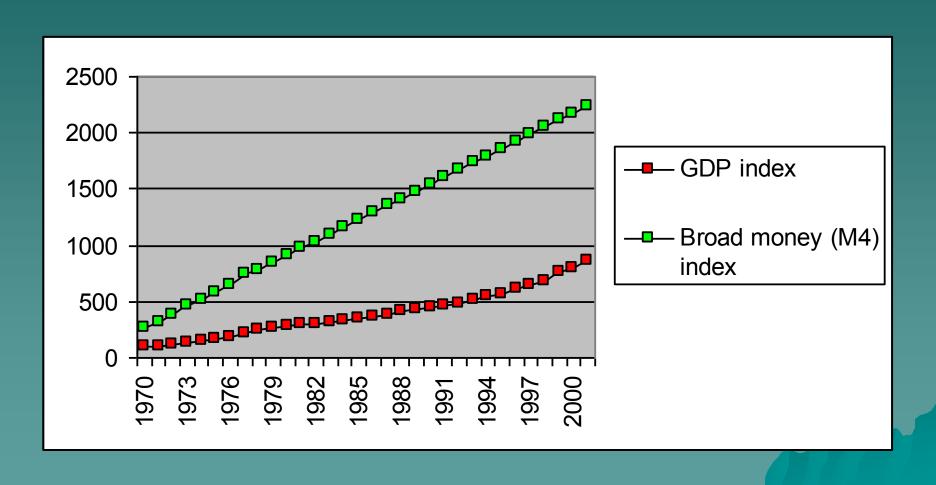
## What does all this have to do with the environment?



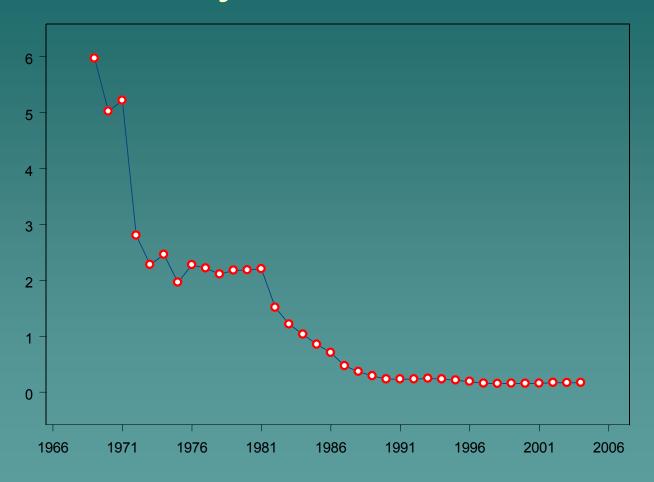
### Money is a store of value

- Money made in one period can make a claim on goods and services in the future
- These goods and services use energy and resources
- The money supply is hugely increasing
- This is the driving force behind economic growth

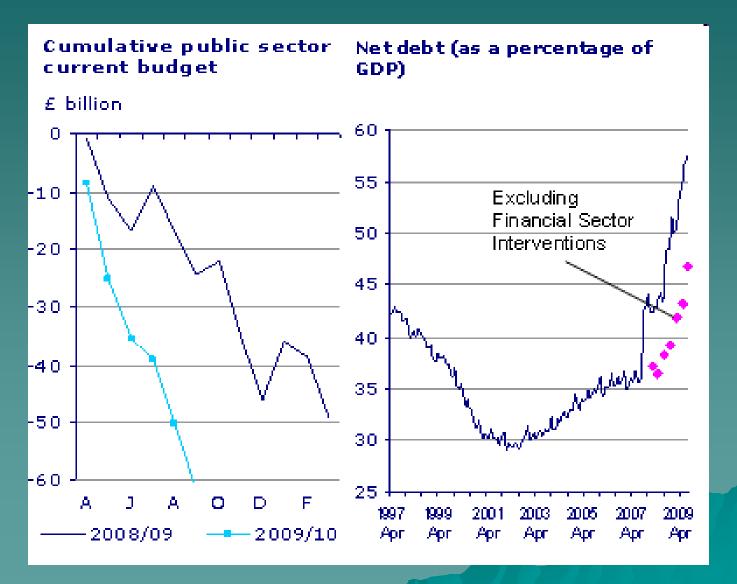
# Distance between money and economic activity



## Proportion of government to bank money in UK, 1968-2004



### UK public debt ballooning



#### Policies

Money to be created as credit not debt Tobin Tax on international currency transactions

Intention of monetary policy should be to balance money supply with level of economic activity

Money should be created as a public resource, not privately, by banks



# Can we design money to create a green economy?

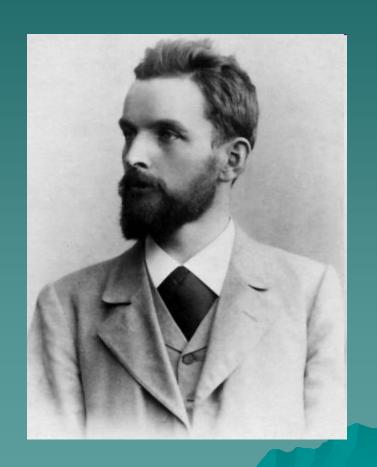
- Shift consumption into the local economy?
- Encourage activity in the core economy?
- Counteract recessionary pressures?
- Reduce consumption?

## Velocity as well as quantity is important

- Quantity theory of money:
  - -MV = PT
  - M is the quantity of money in the economy
  - V is the speed with which it circulates (number of times it is spent)
  - -P = the price level
  - -T = the number of transactions

## Can we change the velocity of circulation?

- Interest encourages people to hold money and slows it down
- Negative interest (demurrage) might speed it up
- Silvio Gesell (1862-1930)



### The Chiemgauer

- Uses principle of demurrage
- Electronic and paper money
- Back one-forone by euros
- Can be exchanged back for a 5% fee
- Accepted by 150+ shops

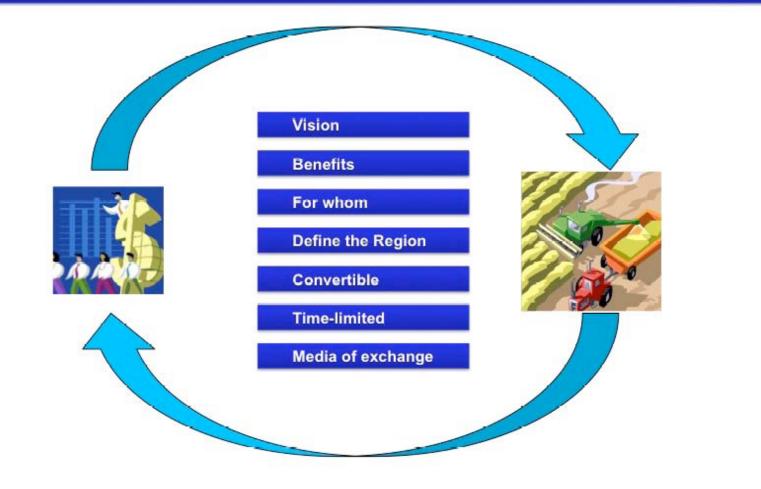




http://www.chiemgauerregional.de/

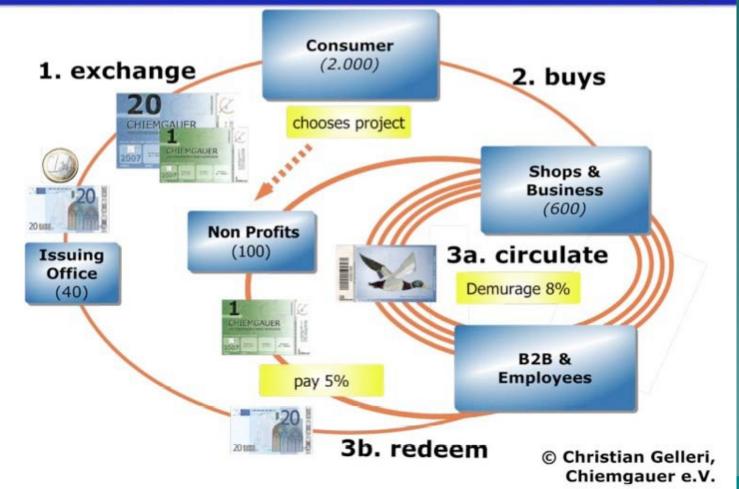
#### **Design Of Local Currency**





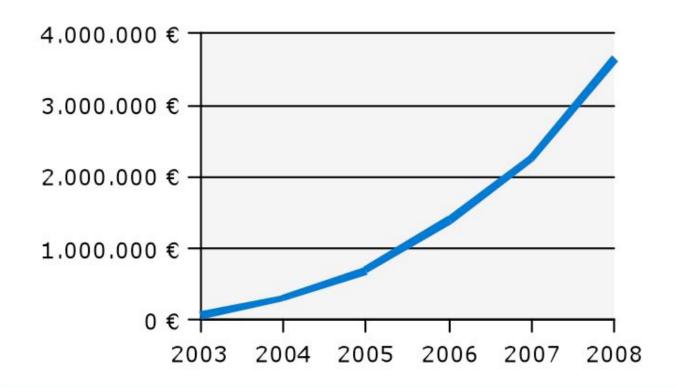
#### **Currency-cycle**





#### Turnover of all participants



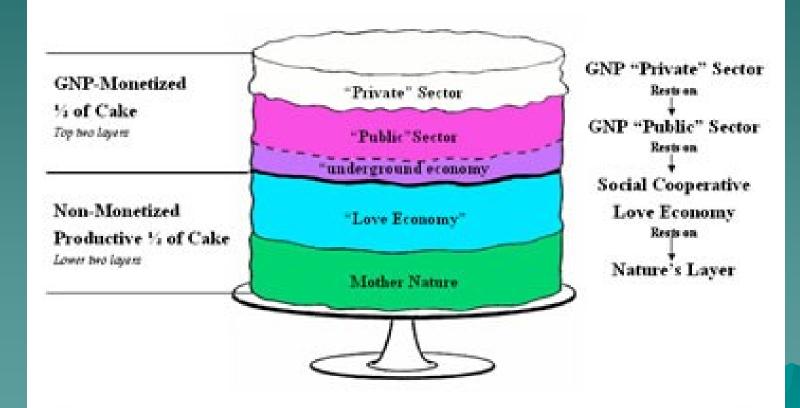


2008 = 3 Mio. CH + 0.6 Mio. ST

http://www.uea.ac.uk/env/ijccr/pdfs/IJCCRvol13(2009)pp61 -75Gelleri.pdf

#### Encourage activity in the core economy?

Total Productive System of an Industrial Society (Layer Cake With Icing)



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### Time Money or Service Credits



- Money denominated in hours: one hour, one credit
- Co-production social service ethos is crucial
- Balance does not matter generational solidarity
- Connections made by a broker and by telephone
- Usually more successful when run by a social services agency
- Unlike LETS, does reach the poor/excluded/elderly