## 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 workers 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

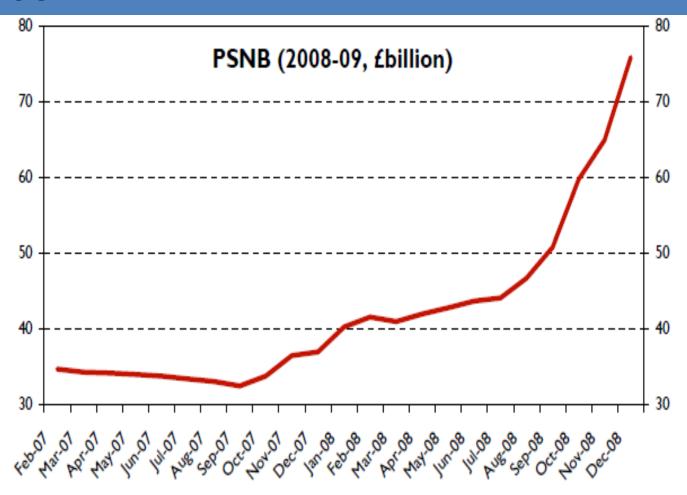
## What Mervyn King Said

 'Of all the many ways of organising banking, the worst is the one we have today.'

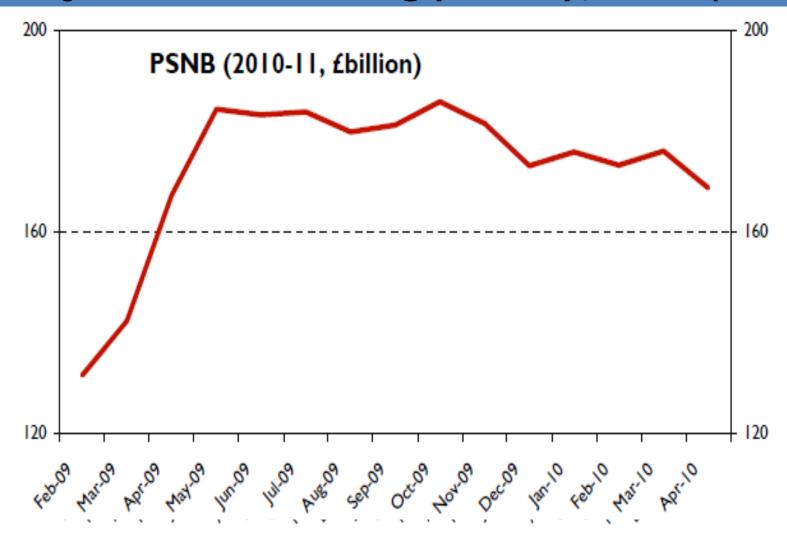


 'Unemployment is up, businesses have closed, and the direct and indirect costs to the taxpayer have resulted in fiscal deficits in several countries of over 10% of GDP – the largest peacetime deficits ever.'

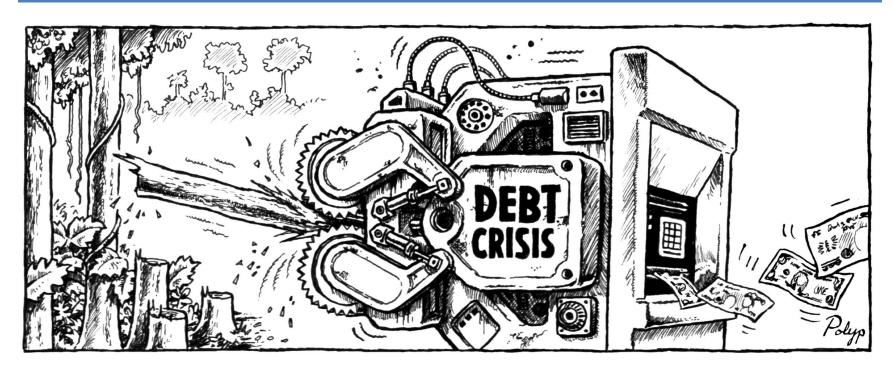
## Projected borrowing(PSNB), 17 Dec. 2009



### Projected borrowing(PSNB), 21 April



## And what he didn't say



- 97% of money is created as debt by banks:
- 95% of money transactions have no contact with real goods
- Allows people to make a claim on future value

#### The Crises are the Same Crisis

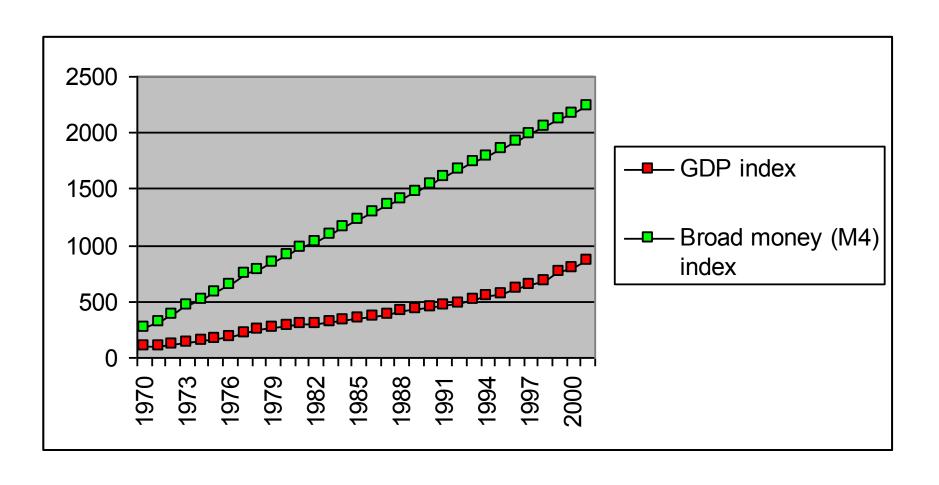
- **X** Sustainability requires equality
- ★Sustainability requires financial stability, because debt-free money forces economic growth
- ➤ Debt requires inequality, because of interest transferring money from poor to rich



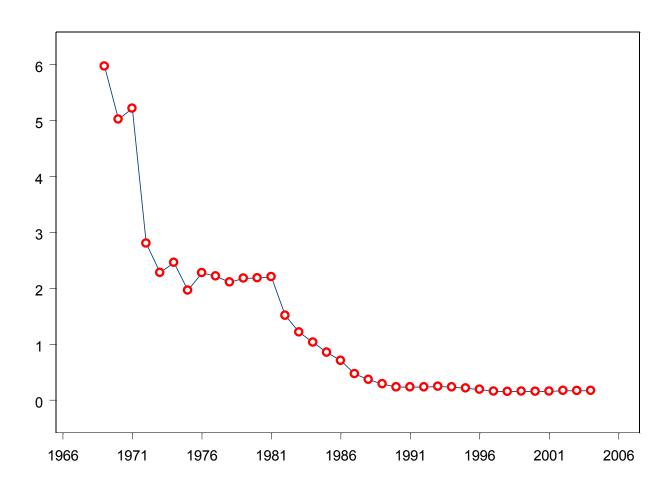
## Money is a store of value

- 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

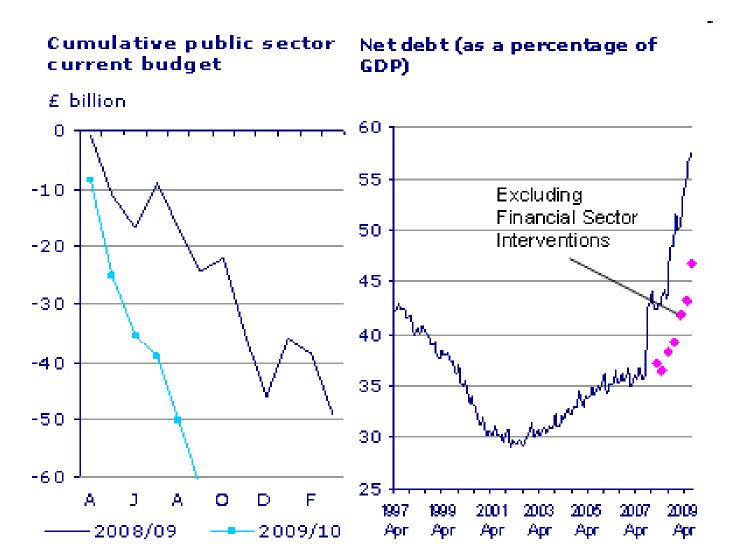
## Distance between money and economic activity



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



## UK public debt ballooning



#### **Policies**

Money to be created as credit not debt

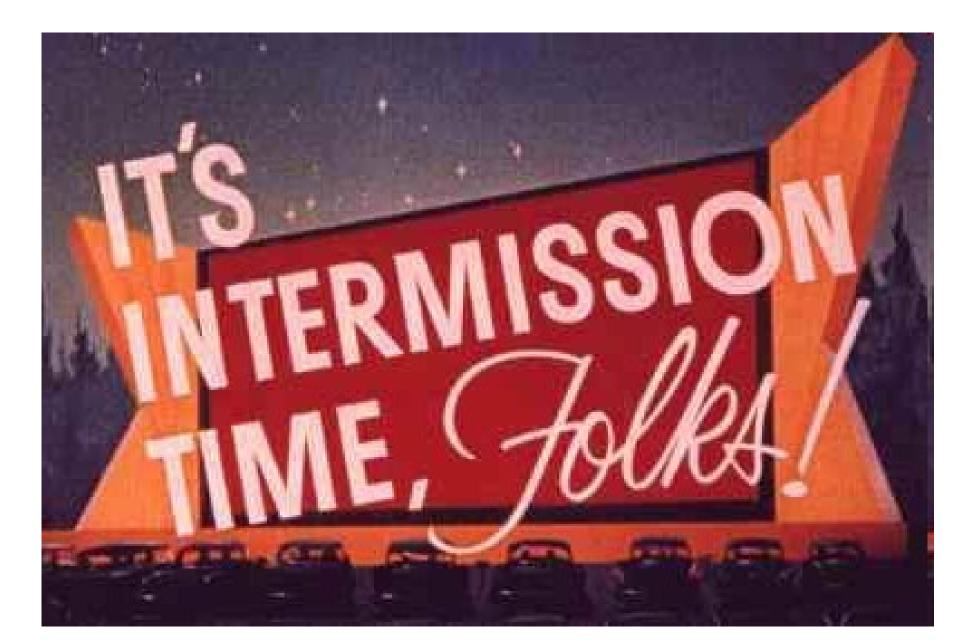
Tobin Tax on international currency transactions

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-for-one by euros
- Can be exchanged back for a 5% fee
- Accepted by 150+ shops

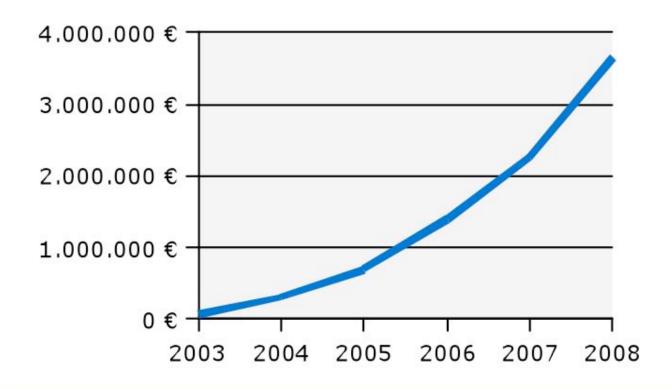




http://www.chiemgauer-regional.de/

#### 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

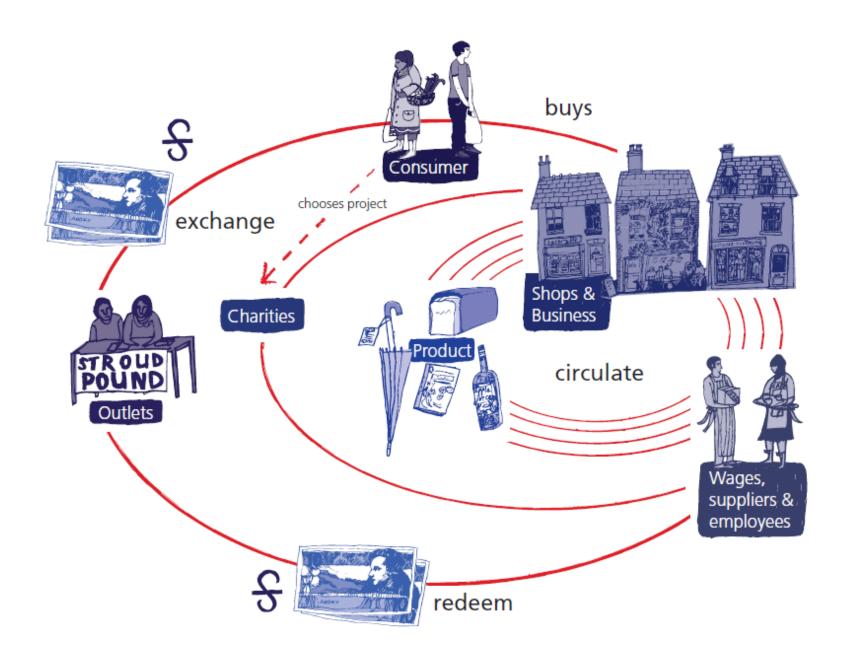
#### **About Stroud**



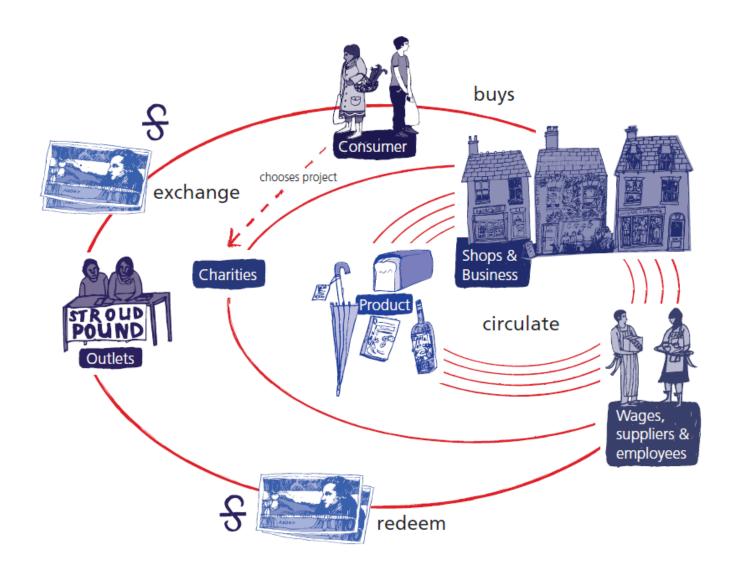
- Stroud is an exemplar sustainable community located in rural Gloucestershire some 30 miles North-East of Bristol, UK
- A former textile town, it suffered severe industrial restructuring in the second half of the 20<sup>th</sup> century
- Site of one of the UK's most successful LETS schemes (North, 2008)
- One of the first UK towns to register with the nascent Transition Network in September 2006

#### How it works

- Issued by the co-operative on a one-for-one exchange basis for pounds sterling
- Businesses, consumers and charities are encouraged to join the scheme, although it is possible to pick the notes up in change and use them for purchasing
- When consumers buy Stroud Pounds a percentage of the value is donated to a local charity of their choice
- This is balanced by a 3% 'redemption' charge when businesses exchange the money back for sterling



#### The Stroud Pound Roundabout



## Reinforcing the local economy

- 3% demurrage to increase velocity of circulation
- Identification with local economic themes
- Laurie Lee

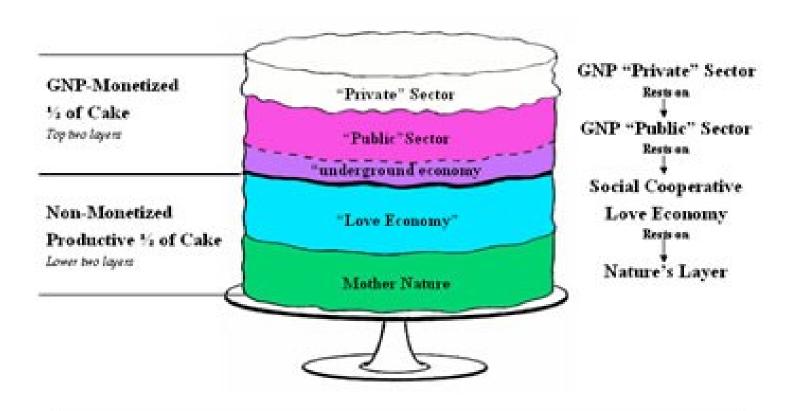


## Story after one year

- Launched in September 2009
- A total of £10,066 were exchanged for Stroud Pounds
- Slightly over half of those (£5940) had been redeemed
- £290 allocated to the ten local good causes which people had chosen. A year after the launch of the scheme SP4,126 were in circulation. The scheme had around 180 consumer members and 44 outlets or service providers where the local currency could be spent.

#### Encourage activity in the core economy?

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



## 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