

# **How to Make Banks Socially Useful**

## **The Case for Local Banking and Local Money**

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**Just Banking: Building a banking sector that serves society**  
Edinburgh Business School, University of Edinburgh

## Lord Turner (FSA):

**“Banks have become too big to be ‘socially useful’”**

- What makes banks ‘socially useful’?
- What is the right size for banks?
- How can the banking sector be reformed to contribute to society?

## The Record of the UK Banking Sector

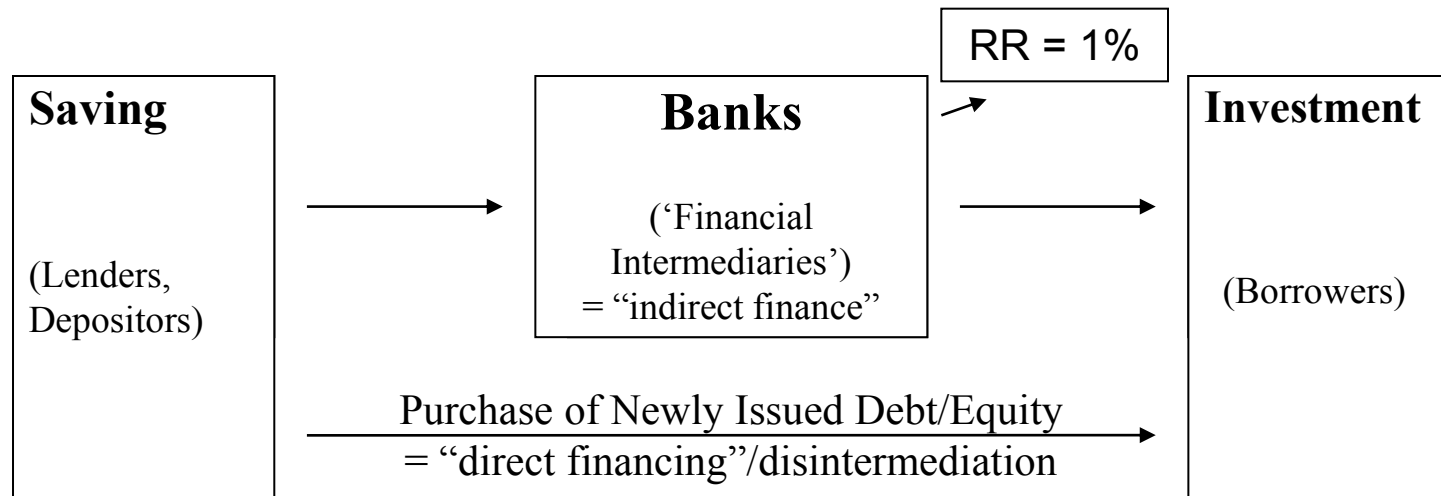
It has been the cause of the recurring boom-bust cycles and banking crises.

It has focussed too much on large-scale financial-sector borrowers.

It has failed to support the real economy, small firms, the regional economy and sustainable development.

What do banks do, and what is their key function?

## Textbook Representation of Banks as Intermediaries



An increase in so-called direct financing is said to constitute **'disintermediation'**, since the alleged intermediary function of banks is not required for the economy.

See, for instance, Miller and VanHoose (1993).

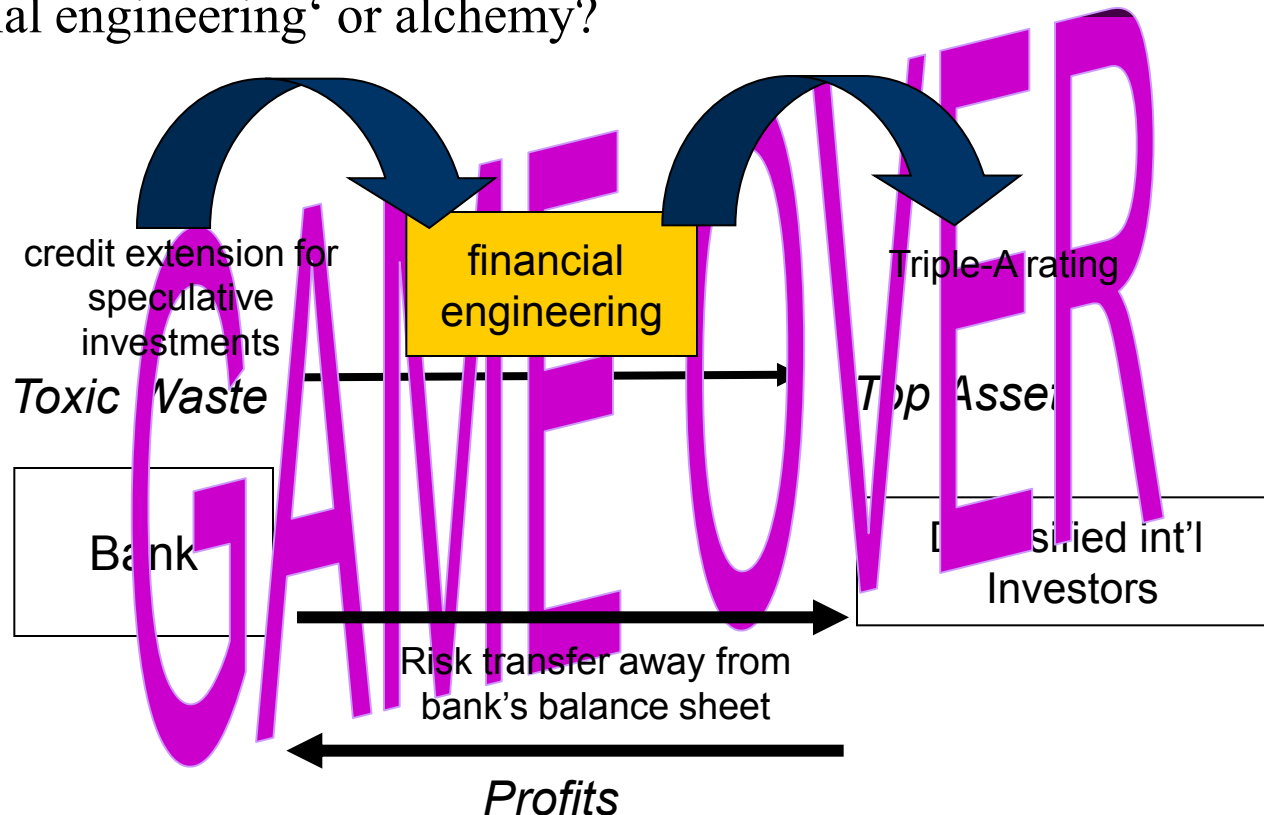
## Asian Economies Rely Much More on Banks

### When the Asian Crisis Happened Asia was Told by the US:

- “The crisis happened, because Asian economies rely too much on banks.”
- “Banks are unstable and unreliable.”
- “The solution is therefore to switch to ‘direct finance’ by using the stock markets and bond markets.”
- “To achieve this, Asian countries should deregulate, liberalise and privatise; securitise, originate and sell loans, trade and speculate in loans and their derivatives, rely on new financial products such as CDS, CDO and structured vehicles investing in them:  
financial engineering that does not require banks...  
Plus: central banks should be made independent from governments.”
- “This system will deliver more growth and stability...”

It seemed to work in theory....

- The transformation from ,toxic waste‘ to top-investment:  
,financial engineering‘ or alchemy?



## The Leading Theories in Economics Did Not Include Banks

➤ This is now lamented by the Fed:

“It is fair to say ...that the core macroeconomic modelling framework used at the Federal Reserve and other central banks around the world has included, at best, only **a limited role for ...credit provision, and financial intermediation.**”

“...asset price movements and the feedback among those movements, credit supply, and economic activity were **not well captured** by the models used at most central banks. “

Donald Kohn, Vice-Chairman, Federal Reserve (October 2009)

# The Fundamental Flaw in Thinking: The Role of Banks

Empirically, it had been found that **banks are special**

Their function cannot be easily replaced by other financial players or markets.

- Fama (1985) shows that banks must have a kind of monopoly power compared to other financial institutions.
- Ashcraft (2005) shows that the closure of small regional banks significantly hurts the local economy.

But economic theory could not explain why.

Here is why.



## Bank credit creation

### Balance Sheet of Bank A

**Step 1** Deposit of \$100 by customer at Bank A

Assets	Liabilities
	\$100

**Step 2** \$100 used to increase the reserve of Bank A

Assets	Liabilities
\$100	\$100

## Banks do not actually lend money!

**Step 3** Loan of \$9,900 granted, by crediting borrower's bank account with deposit.

The borrower is treated **as if** she/he or the bank had actually deposited the money, but no money was deposited.

Assets	Liabilities
\$100 +	\$100 +
<b>\$9,900</b>	<b>\$9,900</b>

**NB: No money is transferred from elsewhere**

**There is no such thing as a 'bank loan'.**

## What Makes Banks Special?

- Answer: their role as the accountants of the economy AND their ability to individually create credit (MacLeod 1855; Schumpeter 1912).
- with  $RR=1\%$ , a \$100 deposit allows a bank to lend at least \$9,900.

Assets	Liabilities
\$100 (RR)	<b>\$100</b>
<b>+ \$9,900</b>	<b>+ \$9,900</b>

- banks are special, because they can create new money  
‘out of nothing’ = **credit creation.**
- **This is how about 98% of our ‘money’ is created.**

## What is money?

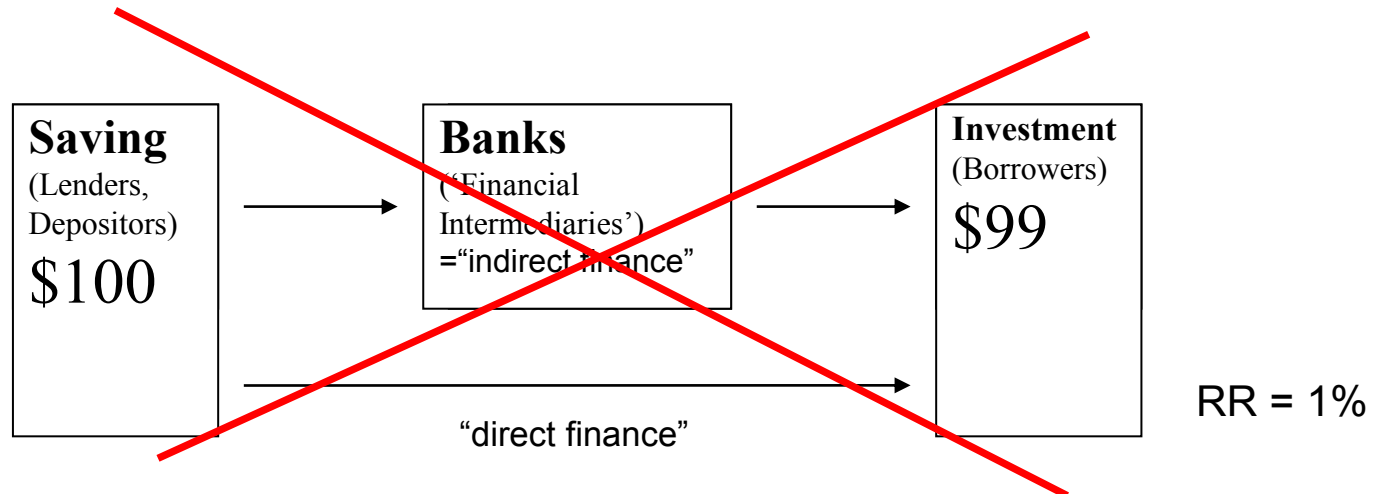
- Where does it come from?
- Only about 3% of the money supply comes from the central bank.
- Who creates the remaining 97% of our money supply and who allocates this money?

### **A: The commercial banks**

- This explains why banks are special: They are not (just) financial intermediaries. They have a license to ‘print money’ by **creating credit**. There is no such thing as a ‘bank loan’. Banks do not lend money, they create it.

Schumpeter (1954): “...it proved extraordinarily difficult for economists to recognise that **bank loans ... create deposits**. In fact, throughout the period under survey they refused with practical unanimity to do so”.

## Banks are Not Financial Intermediaries



They are the **Creators of the Money Supply**.

And they have a monopoly on another pivotal role:

Banks are the **central settlement system** of the economy (Schumpeter, 1912).

## The Credit Theory of Money (Werner, 1992, 1997):

money used = value of all market transactions

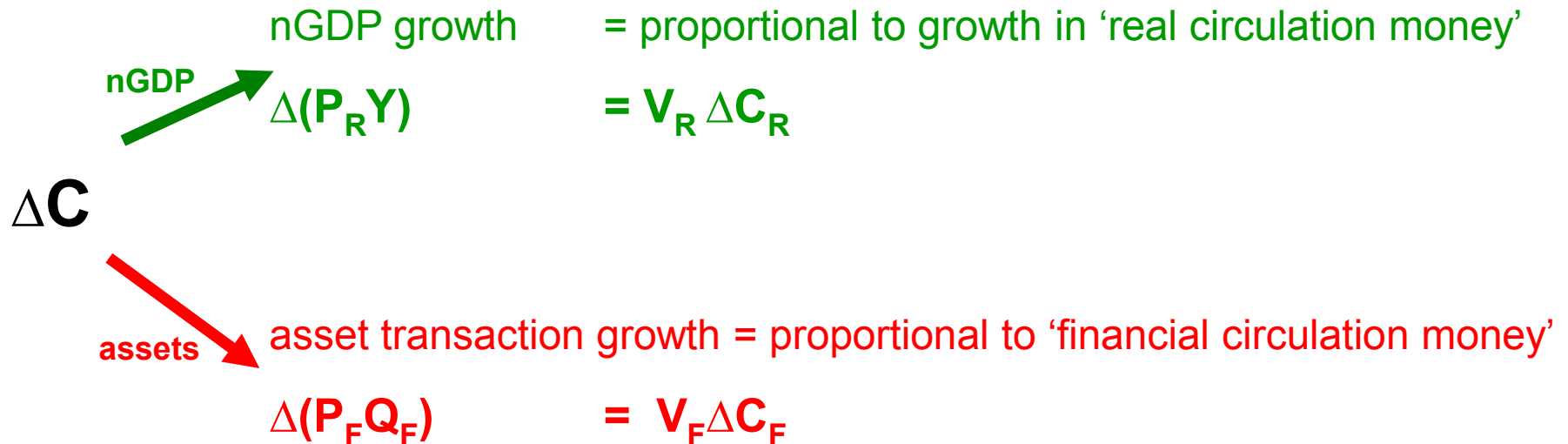
Money is best measured by its credit counterpart (C) which created it.

Financial transactions are not part of GDP.

If we want to link this to GDP, we must divide money/credit into two streams:

$$C = C_R + C_F$$

Considering growth:



**This explains many puzzles in economics:**

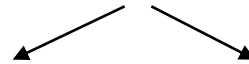
- velocity decline
- asset prices
- the 'Great Moderation'
- why interest rate and fiscal policy have been ineffective
- why there are recurring banking crises, as we will see

## The effect of credit creation depends on the use of money

**Case 1.** The newly created purchasing power is used for transactions that are part of GDP. In this case, nominal GDP will expand:

**credit creation for 'real economy transactions'  $C_R \rightarrow$  nominal growth**

two possibilities



### **(a) Inflation without growth:**

Credit creation is used for consumption:

More money, but same amount of goods and services

**= consumptive credit creation**

### **(b) Growth without inflation:**

Credit creation is used for productive credit creation:

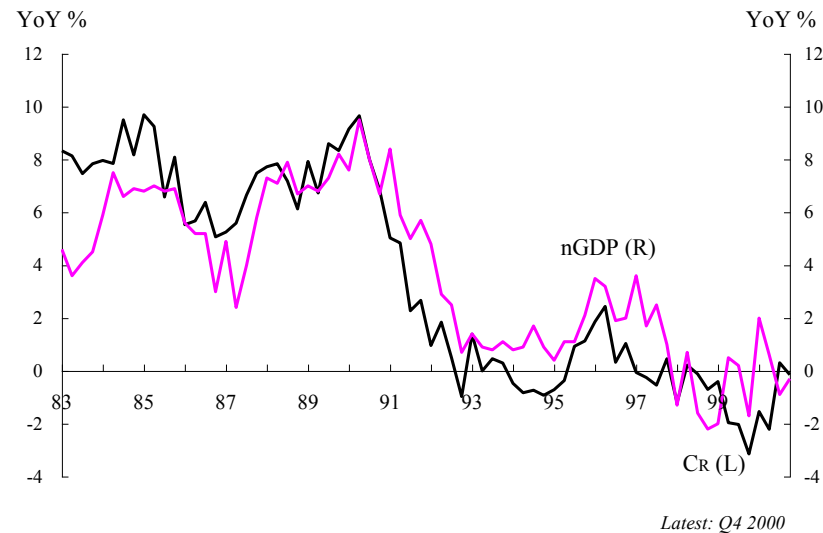
More money, but also more goods and services

**= productive credit creation**



# Explaining Growth: Driven by credit creation for GDP transactions ( $C_R$ ), not interest rates or fiscal policy

## Japan



## The effect of credit creation depends on the use of money

**Case 2.** Newly created purchasing power is used for transactions that are not part of GDP (financial and real estate transactions). In this case, GDP is not directly affected, but asset prices must rise (asset inflation).

**Credit creation for financial transactions  $C_F \rightarrow$  Asset Markets**

### **Asset Inflation:**

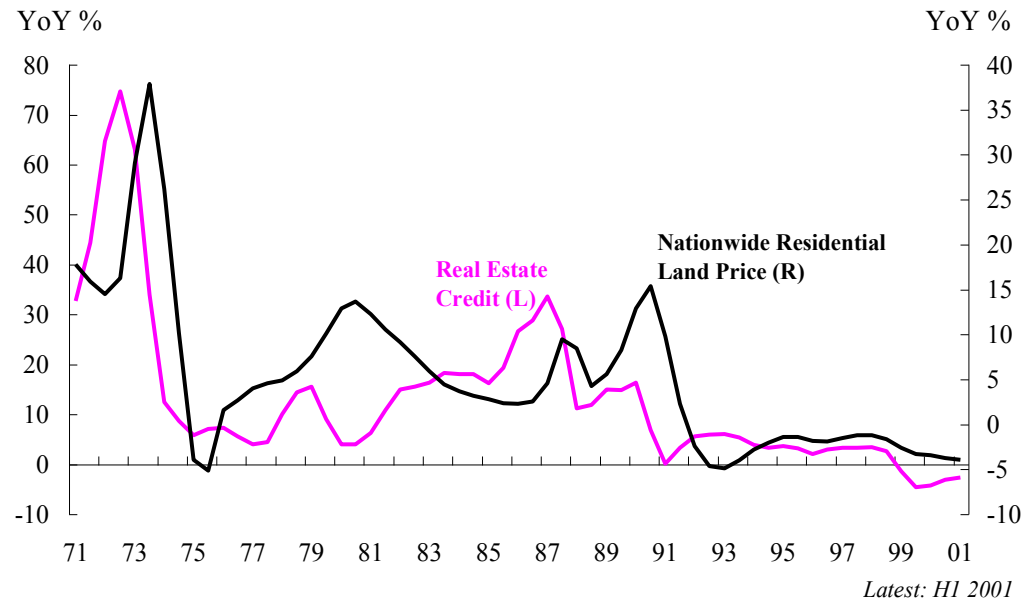
Credit is used for financial and real estate speculation:

More money circulates in the financial markets

**= speculative credit creation**

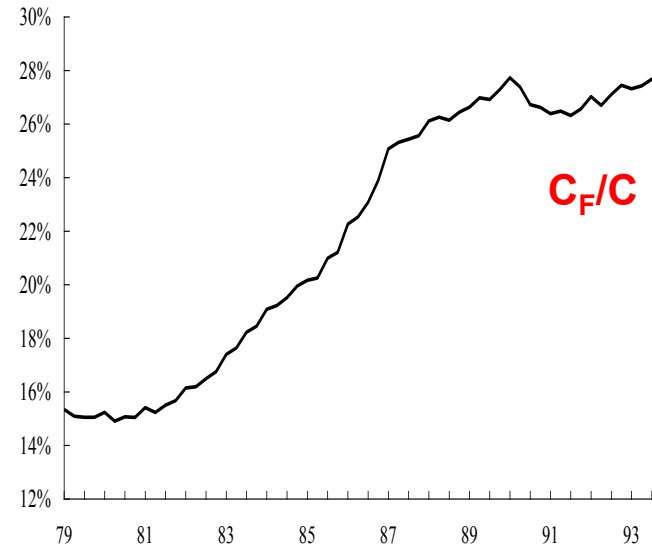
## Credit Explains Asset Prices

Credit used for real estate transactions moves land prices



## Credit explains boom/bust cycles and banking crises

- A significant rise in **credit creation for non-GDP transactions (financial credit  $C_F$ )** must lead to:
  - asset bubbles and busts
  - banking and economic crises
- USA in 1920s: margin loans rose from 23.8% of all loans in 1919 to over 35%
- Case Study Japan in the 1980s:  $C_F/C$  rose from about 15% at the beginning of the 1980s to almost twice this share

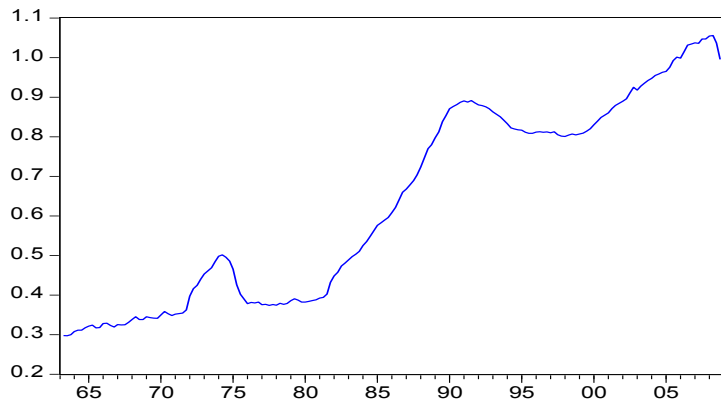


Source: Bank of Japan

$C_F/C$  = Share of loans to the real estate industry, construction companies and non-bank financial institutions

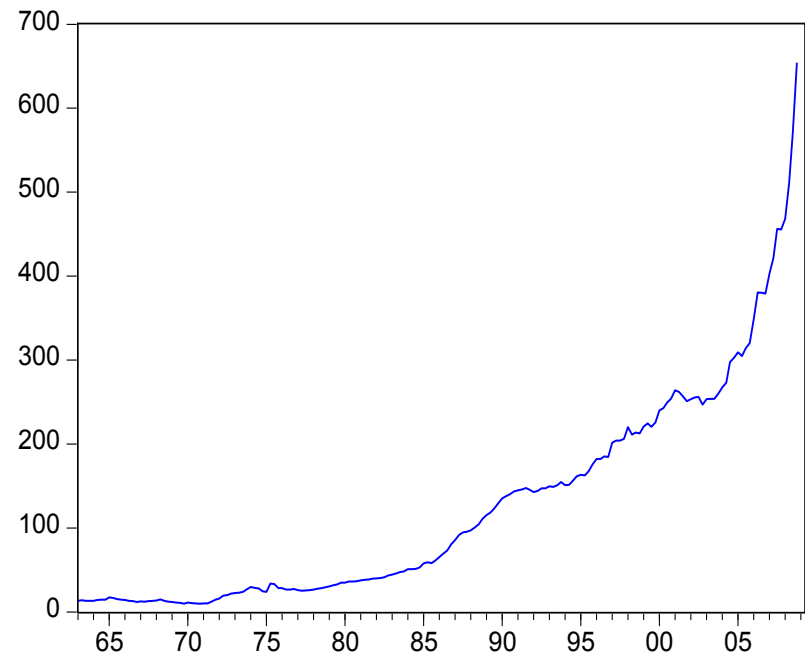
**UK bank credit creation for the 'real' economy has remained below GDP (though is increasingly used for consumption)**

$$C_R/nGDP \leq 100\%$$



**UK bank credit creation for financial speculation has soared**

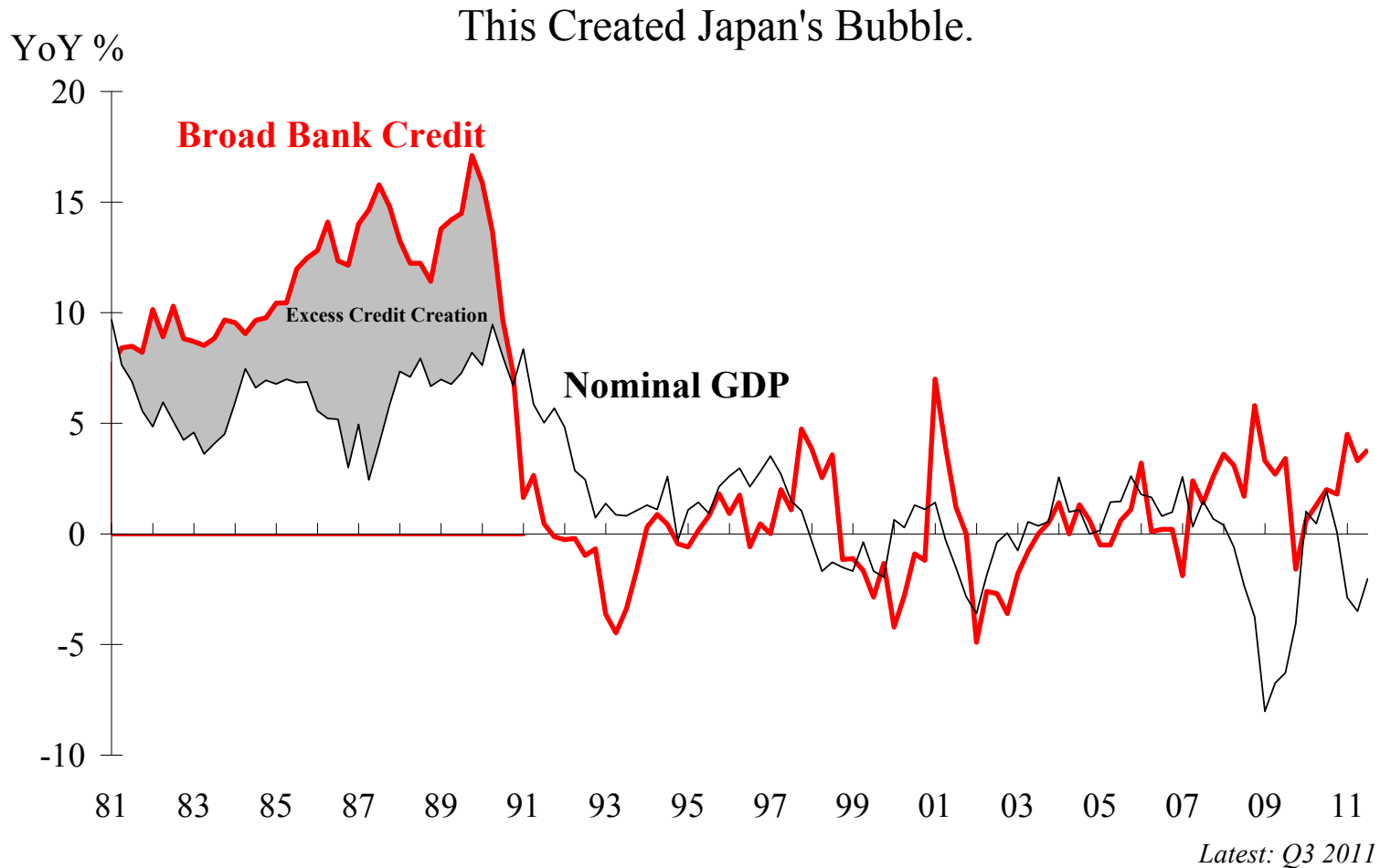
$$C_F/nGDP > 600\%$$



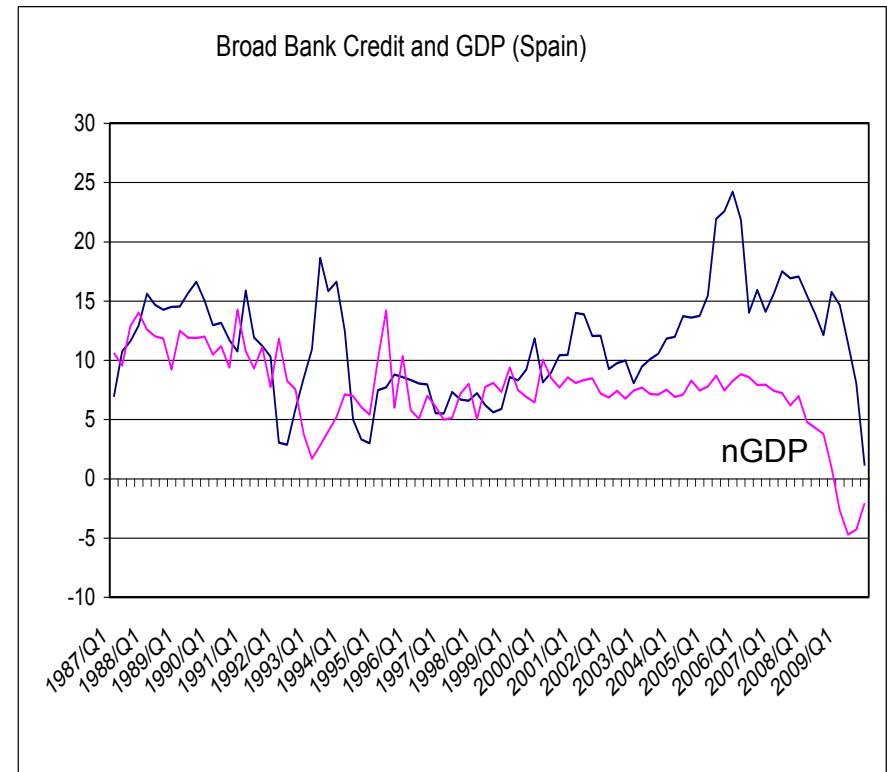
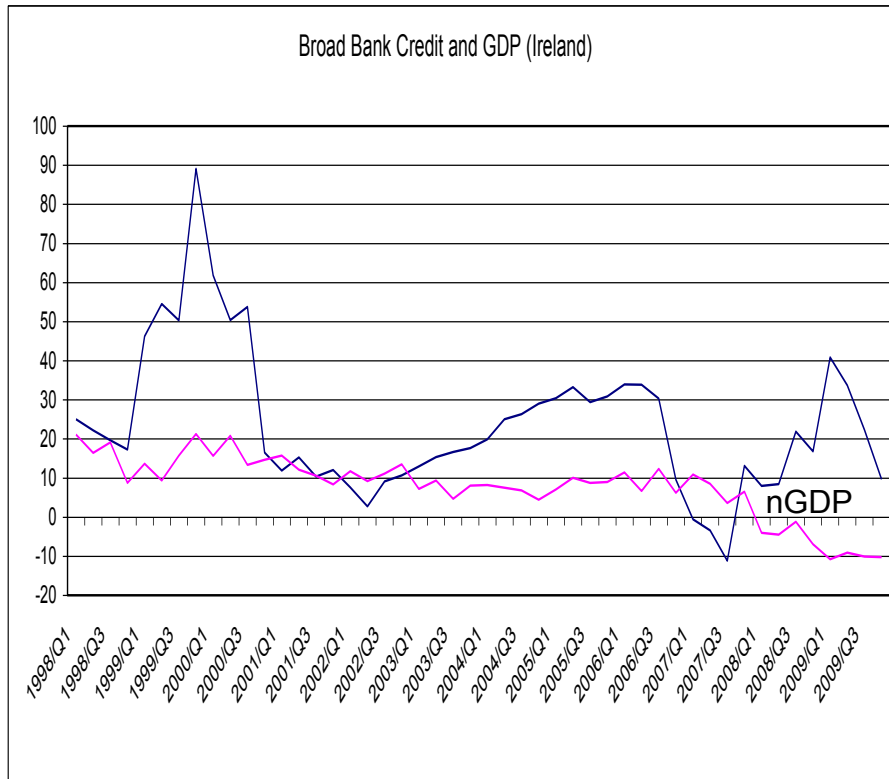
**Result:**

**Modest GDP growth, inflation and a vast asset bubble that must cause a banking crisis.**

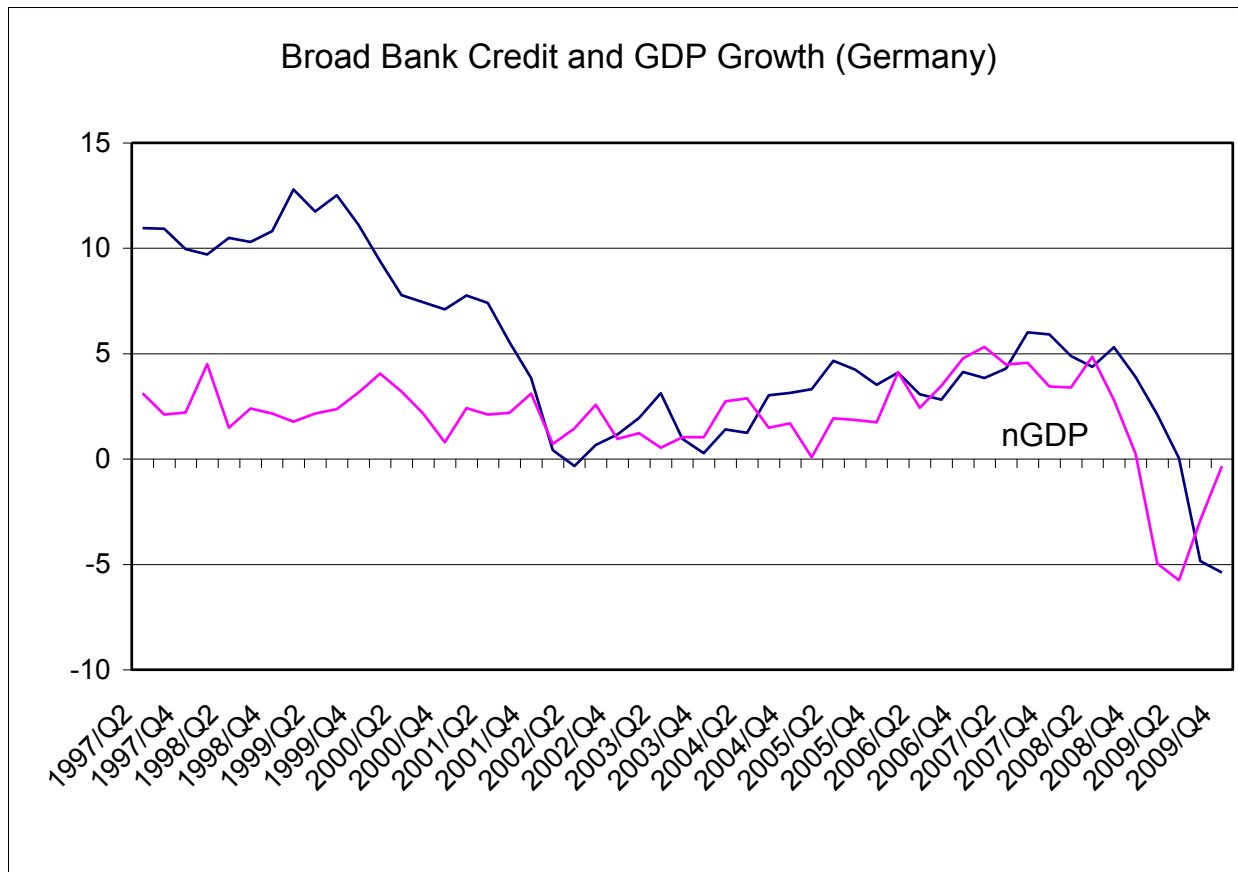
# Warning Sign: Broad Bank Credit Growth > nGDP Growth



# This Created the Bubbles and Crises in Ireland & Spain: Broad Bank Credit Growth > nGDP Growth

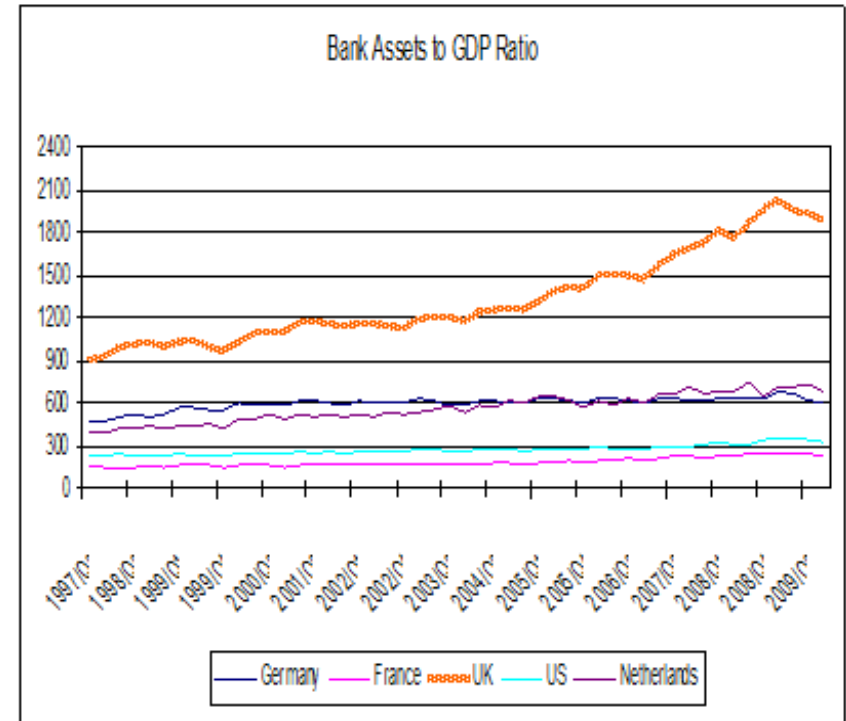
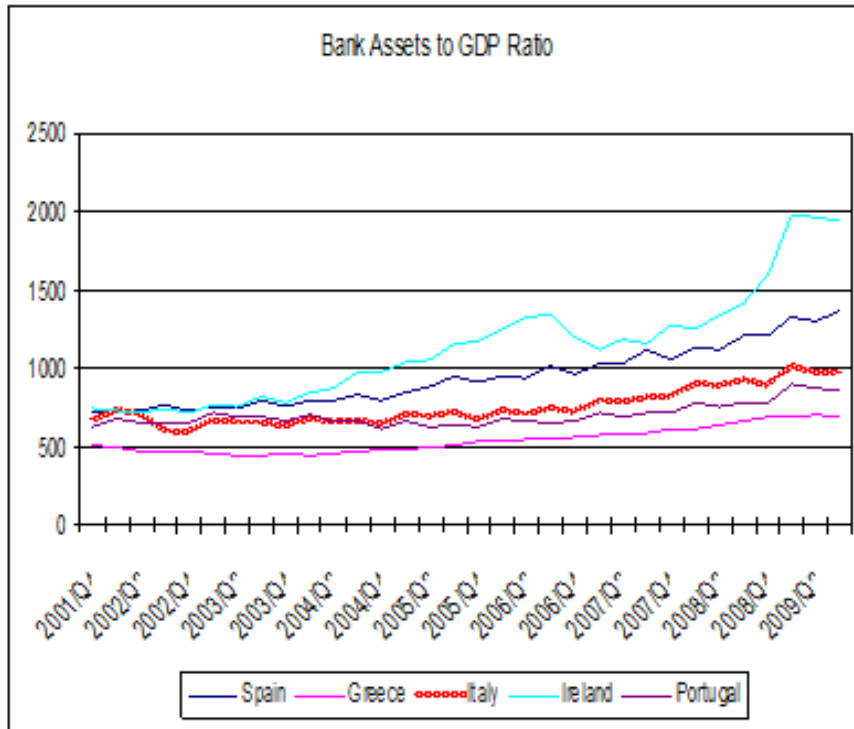


## How to Avoid Asset Bubbles & Home-Grown Banking Crises





## Out-of-control $C_F$ is the problem



## Bank credit creation is a public privilege

- It is not a law of nature that commercial banks should be the institutions creating and allocating the money supply.
- It is a public privilege granted to banks, on the implicit understanding that they will not use it against the public interest.
- However, governments and regulators have failed to ask banks to **create and allocate credit mainly for productive purposes** and transactions that are part of GDP. **Only productive credit creation is sustainable.**
- Banks have responded by using the privilege to create the money supply **for their own short-term (speculative) gains.**
- This creates unsustainable asset bubbles and costly banking crises and subsequent recessions.

## Policy Lessons

- Given the **pivotal role of credit creation and its allocation** all methods to **encourage productive credit creation** and **restrict unproductive bank credit** need to be considered.
- **Capital adequacy-based rules**, as recommended by the Basel Committee, have **no track record** of doing the job. They cannot end the boom-bust cycles and banking crises.
- The only tool that has a strong empirical track record in delivering both the right quantity and allocation of credit is a form of **direct ‘credit guidance’** or ‘credit controls’, used in many countries (France until the 1980s: ‘*encadrement du credit*’; East Asia: ‘**window guidance**’).
- This tool has been at the core of the East Asian economic miracle and remains the central mechanism explaining decades-long high and stable growth in China.

## All central banks used to impose **direct guidance** of commercial bank credit

- 'l'encadrement du credit' (France)
  - 'Kreditlenkung/Kreditplafondierung' (Germany, Austria)
  - 'credit planning scheme' (India, Thailand)
  - **'window guidance' (Japan, Korea, China)**
  - 'credit control' (US), 'lending ceilings', 'corset' (UK)
- 
- Japan: Used until 1991, throughout highly effective in achieving the credit quantities and allocations demanded of the banks.
  - Banks tend to obey a credit guidance regime

## How to avoid banking and economic crises and maximise non-inflationary growth and development

### No need to

- abolish speculation or punish speculators
- introduce a 'Tobin tax' on financial transaction
- restrict bonuses in the financial sector
- regulate hedge funds further
- create more international regulatory bureaucracies
- create more complex capital adequacy rules: European credit union leaders have warned that they will hurt credit unions – who were not responsible for the crisis

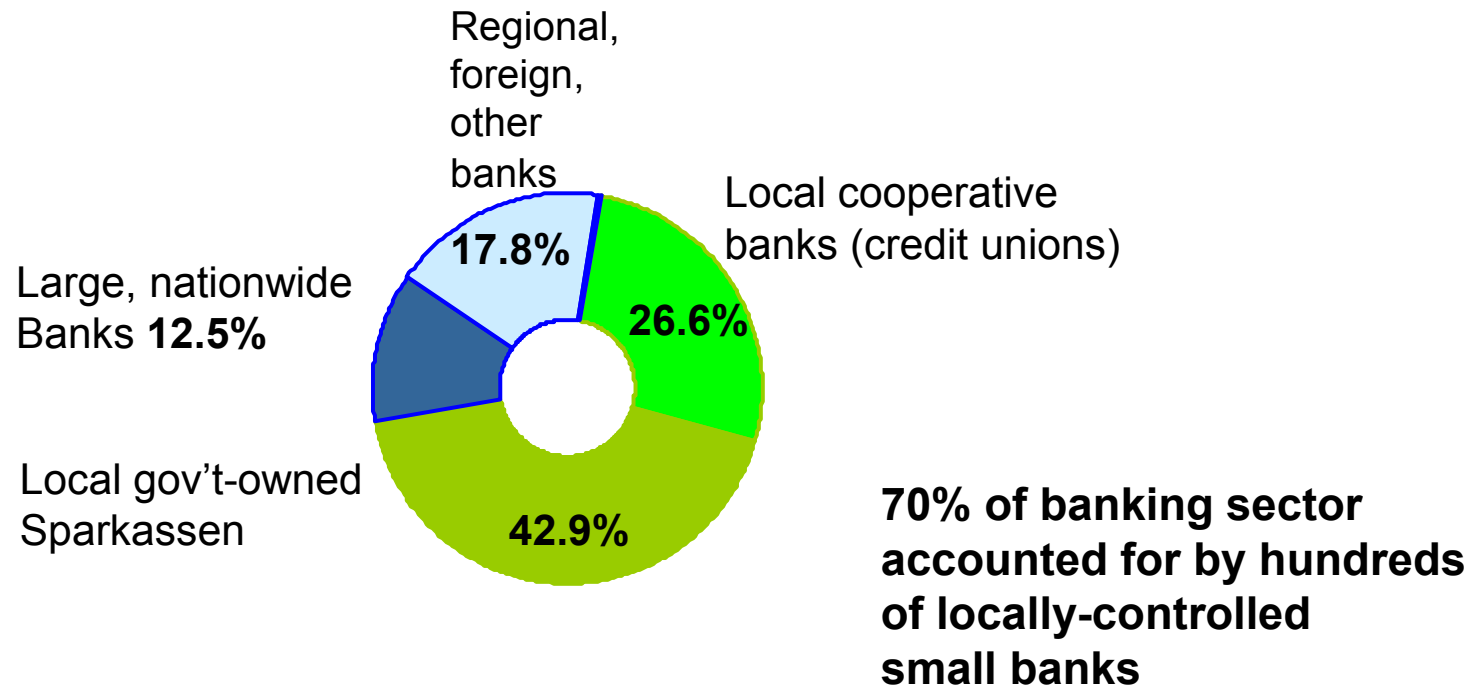
All governments need to do is introduce the following regulation:

**Banks must be forbidden to extend credit for transactions that are not part of GDP**

## Policy Lessons

- Another way to obtain a sustainable allocation of credit creation is to **shape the structure of the banking sector** so that banks dominate, which have **no interest in harmful speculative credit creation: small, locally-headquartered banks.**

### Banking in Germany



## Some UK banks extend productive and sustainable loans:

- There are banking operations in Britain, which:
  - pay no bonuses, often no salaries (run by volunteers)
  - do not lend for speculative purposes
  - only offer simple products
  - Give all the profits they are making back to society – mostly the local community where they are based
  - help mainly less well off individuals and small firms
  
- Who are these financial institutions? Should we have more of those?

## Some banks extend productive and sustainable loans:

- These are the **credit unions**.
- They are owned by their customers = members.
- They contribute positively to society. They do not create bubbles and banking crises.
- In Germany, France, Canada and Ireland they account for 20% to 30% of all bank deposits.
- In the UK, mutual, cooperative banks and credit unions account for a far smaller share of the banking sector.



## Credit unions have been artificially restricted in the UK

- In the UK they account for 0.5% of all bank deposits.
- The biggest German credit union has E25 bn in assets. The biggest UK credit union has £25 m in assets.
- Why?
- In the UK, credit unions are severely hampered by **quantitative restrictions** on the maximum amount of loans to each customer (£15,000)...
- ...and concerning the maximum amount of deposits from each customer (£ 10,000).
- Severe restrictions apply, concerning who and for what purpose they can lend, and who can become a depositor.

## Have the wrong financial institutions been restricted?

- Why **so many restrictions on the sustainable, socially useful banks?**
- Why **so few restrictions on the profit-oriented, private sector commercial banks** about how they can use their public monopoly privilege of how much money to create and who to give it to?
- Why not abolish all restrictions on credit unions, but introduce direct restrictions on the amounts banks can lend for speculative transactions?

## Reform Proposal 1

### End the Artificial Suppression of the Third Sector in the Financial System: Create Hundreds of Locally-based, Cooperative/Mutually/Municipality- Owned Banks/Credit Unions

- Least radical proposal: All current institutions to continue in their present form
- The current artificial restriction on credit unions and the establishment of Third Sector (mutually/cooperatively owned) banks cannot be justified even with mainstream economics
- Advantages of reform proposal:
  - Credit unions account for up to 1/3 of the banking sector in other countries (<1% in UK)
  - They contribute to stability and equity
  - They tend not to engage in destabilising speculative credit creation
  - They tend to focus on productive small firm (SME) credit creation
  - Credit (incl. Microcredit) availability: more opportunities for larger sectors in society
- Successful precedents: Germany, France, Italy, Canada, Ireland, Australia
- *Remaining downsides*: privilege to create and allocate money remains with private sector; national debt continues; big share of national income devoted to servicing gov't debt (transfer from the many to the few)

## Reform Proposal 2

### Credit Guidance: Restriction of Bank Credit Creation for Unproductive Use

- Used to be considered ‘unorthodox’, but post-crisis gov’ts have already used it (though ineffectively)
- Allows virtually all current institutions to continue in their present form
- Continues principle of private money creation & allocation in the banking system
- But makes banks’ credit creation and allocation decisions
  - transparent
  - subject to democratic influence, checks and balances
  - ends boom-bust cycles and banking crises
  - transfers more of the benefits of credit creation to general public
- Successful precedents: Germany, France, Japan, China, Taiwan, Korea, etc.
- *Other downsides of current system remain:* government debt exists, big share of national income devoted to servicing gov’t debt (transfer from the many to the few), fiscal policy not effective

## Reform Proposal 3

Return the Power to Create and Allocate Money to the People,  
to whom this public privilege rightly belongs

- Strong political resistance from the all-powerful banking lobby (biggest contributor to party funding across the globe)
- Advantages:
  - Most efficient and equitable system
  - Advantages of proposals 1, 2 and 3 also apply here, but not their remaining downsides
  - Government receives seigniorage. Hence there is **no government debt**
  - No interest servicing of government debt (>70bn p.a., on the rise)
  - Fiscal policy always effective in stimulating nominal growth
  - Government fully in charge of most powerful economic policy: monetary policy: determining both economic growth and resource allocation
  - Democratic checks and balances on creation and allocation of money exist
- Successful precedents: UK, Germany, Japan, China, USA

## Medieval Britain/Europe

### England 12th century to 1826: split tally



The split tally was a technique which became common in medieval Europe, which was constantly short of money (coins) and predominantly illiterate, in order to record bilateral exchange and debts. A stick (squared Hazelwood sticks were most common) was marked with a system of notches and then split lengthwise. This way the two halves both record the same notches and each party to the transaction received one half of the marked stick as proof. Later this technique was refined in various ways and became virtually tamper proof. One of the refinements was to make the two halves of the stick of different lengths. The longer part was called *stock* and was given to the party which had advanced money or (other items) to the receiver. The shorter portion of the stick was called *foil* and was given to the party which had received the funds/goods. The split tally was accepted as legal proof in medieval courts and the Napoleonic Code (1804) still makes reference to the tally stick in Article 1333.

## Germany



Deutsches Reich: German government-issued paper money

## Guernsey



### Island of Guernsey: Government-issued paper money

‘In 1817, the Island was desperately in need of infrastructure investment, but it was bereft of money. The interest payments alone accounted for most of their tax revenue. They found that they could not bleed any more taxes out of the people and they could not afford to borrow any more money.’



## Modern Britain

1917



UK: Government-issued paper money: 1914-1928

# USA

The standard  
'Federal  
Reserve Note'



JFK's 1963  
'United  
States Note':  
No Fed seal

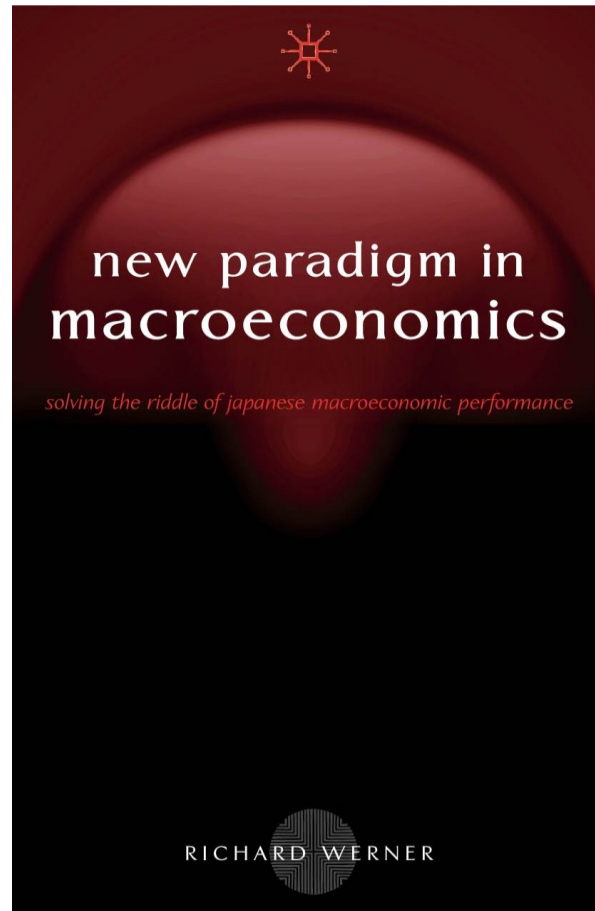


## Reform Proposal 4

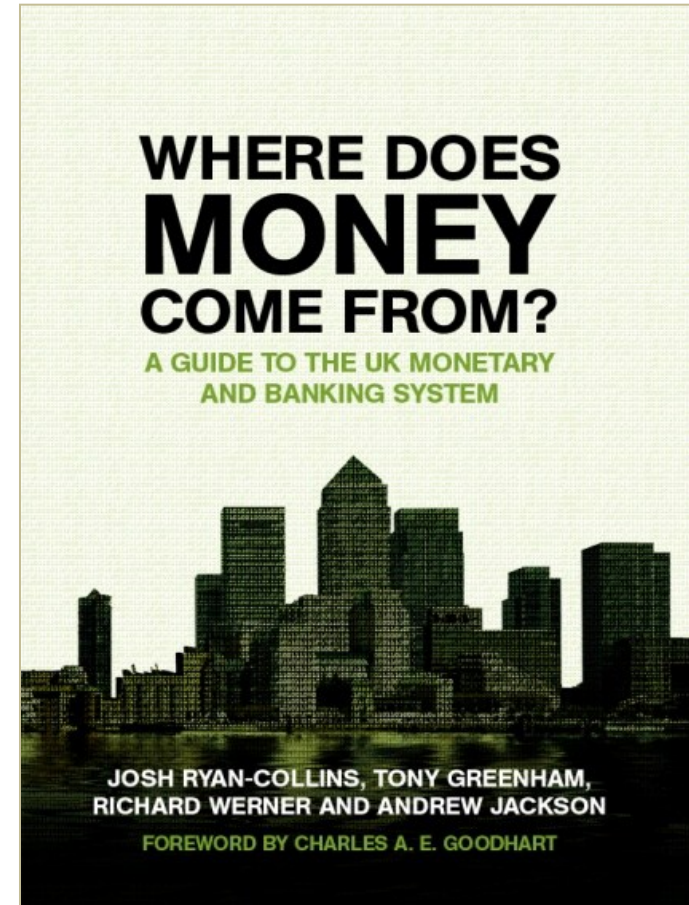
Return Power to Create + Allocate Money to the People, to whom it belongs – and **Devolve Controls to Local Communities: True Regional/Local Public Currencies**

- Strong political resistance from the all-powerful banking lobby
- Advantages:
  - In addition to national public money, decentralisation offers further checks and balances on money issuance powers
  - Allows regionally diverse policies catering to local needs
  - More responsive to public input – more democratic
  - More democratic checks and balances
  - Favours focus on local economic interaction – reduces carbon footprint
  - Renders local communities more autarkic and less susceptible to blackmailing by nation-wide pressure-groups
  - Historical example: ‘Miracle of **Woergl**’

## Further Reading:



Basingstoke: Palgrave Macmillan, 2005



New Economics Foundation, 2011

# How to Create A Recovery After a Banking Crisis: Werner-Proposal of 1994:

## A new policy called "Quantitative Easing" = Expansion in Credit Creation = Total Effective Purchasing Power

Richard A. Werner, Create a Recovery Through Quantitative Easing, 2 September 1995, *Nihon Keizai Shinbun* (Nikkei)

日本経済新聞 1995年(平成7年)9月2日(土曜日) (26)

**実体経済の購買力不足**

一九三〇年代以来、日本が初めて経験するほどの深刻な景況悪化が、一世紀の大恐慌に類似した深刻な景況悪化をもたらしている。この景況悪化は、一世紀の大恐慌に類似した深刻な景況悪化をもたらしている。この景況悪化は、一世紀の大恐慌に類似した深刻な景況悪化をもたらしている。

**景気回復、量的金融緩和から**

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**総購買力を増やせ 4%程度の成長は可能**

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**名目GDPと民間リクイディティ**

**信用破壊招く 不良債権問題**

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## Applying this Framework to the European Sovereign Debt Crisis

- Fiscal positions could look much stronger today if the economically most efficient method of responding to banking crises (e.g. in Ireland) had been adopted: **central bank purchases** of all non-performing assets at face value (zero cost to society and tax payers).
- Given where we are, high debt makes **access to bond markets** precarious for many countries.
- The proposed solutions do not address the problem of **lack of demand**
- The purpose of the official bond purchases is to keep yields down.
- A better **solution is simply not to issue new government bonds.**
- Where to obtain the funding to retire the old ones?

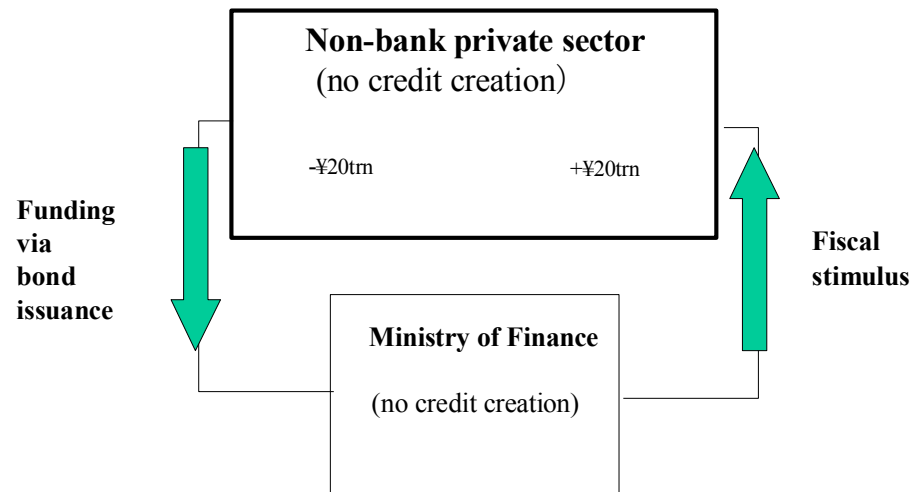
## Werner-Proposal: The solution that maintains the euro and avoids default

- Why use the ECB? Central banks only create about 3% of the money supply in most economies.
- 97% of the money supply is created and allocated by private-sector profit-oriented enterprises, **the commercial banks**.
- So governments should **stop the issuance of government bonds and instead borrow the public sector borrowing requirement from the commercial banks** in their country.
- They can enter into 3-year loan contracts at the much lower **prime rate**.
- The prime rate is close to the banks' refinancing costs of 1% - say 3.5%.

# Why fiscal spending programmes alone are ineffective

## Fiscal stimulation funded by bond issuance

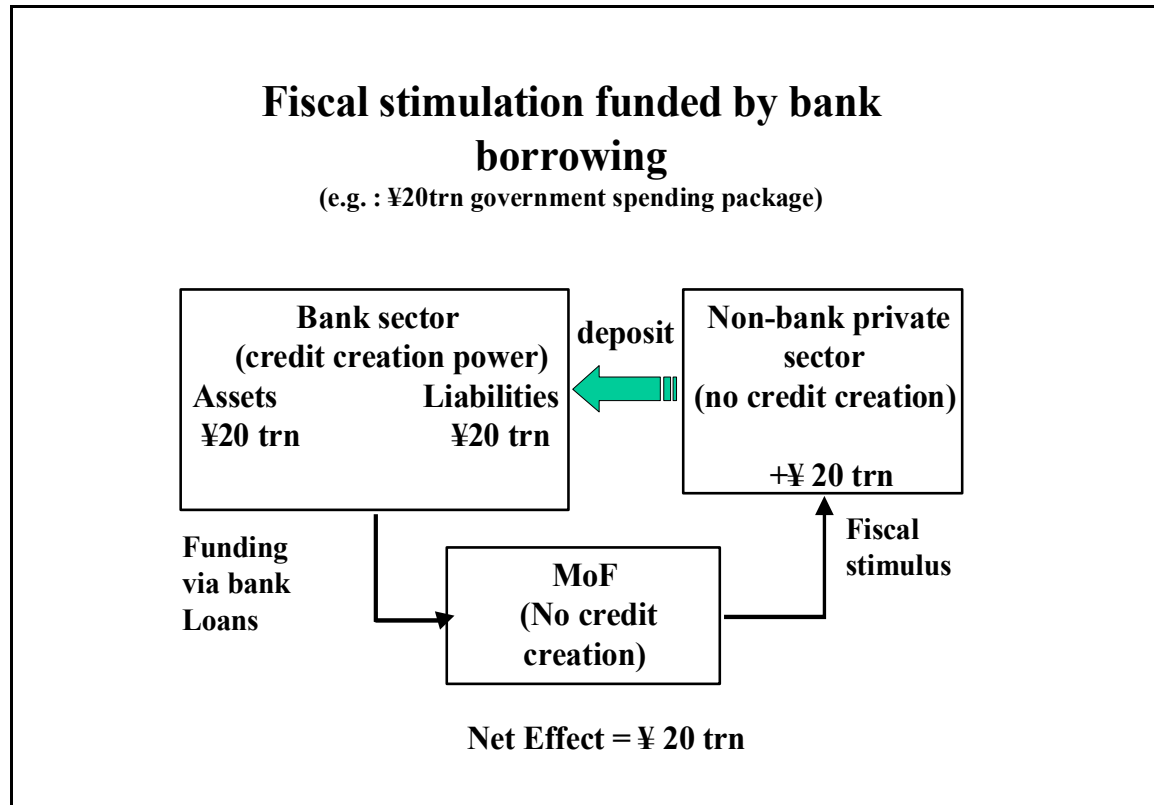
(e.g. : ¥20trn government spending package)



**Net Effect = Zero**



## How to Make Fiscal Policy Effective



## The solution that maintains the euro and avoids default Government borrowing from banks

### Example Italy:

- E 260bn coming due by end of 2012
- The government signs loan contracts for this amount with all banks, proportionately to their size, at the prime rate of 3%.
- Compared to the current market rate of about 6.75% YTM for 10-yr bonds, this represents a saving of 3.75%, i.e. **E 9.75bn**.
- Additionally, bank credit growth would jump start by about 5.5%, and domestic demand would rise sharply within 9 months.

## Advantages of this Proposal

- The proposal will not increase aggregate debt.
- The incentive structure is right, as each country remains in charge of and liable for its debts. Thus e.g. Germany's credit rating will not be damaged.
- But it takes the monthly market pressure out of the picture: no more rising bond yields as old bonds mature, so also no further ECB intervention required or purchases by the EFSF, etc.
- The immediate savings will be substantial, as this method of enhanced debt management reduces the new borrowing costs, even below post-ECB-purchase yields.
- **Instead of governments injecting money into banks, banks give money to governments.**

## Advantages (II)

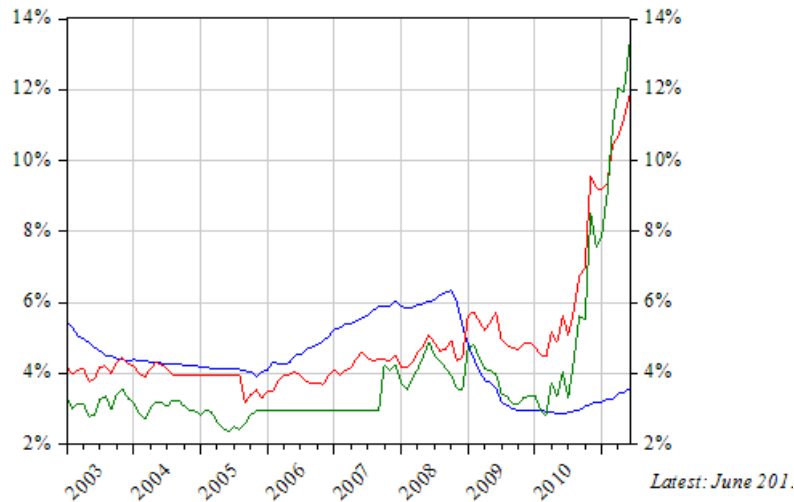
- This helps the banking sector, as its core business, to extend credit, is expanded, thus **increasing retained earnings**.
- These can then be used by banks to shore up their capital. Thus there are substantial savings to the taxpayer as new bank rescues become largely unnecessary.
- Bank credit to the government will not be forced (as is forbidden in the EU treaties) but on a voluntary basis, at the prime rate.
- Eurozone governments remain zero risk borrowers according to the Basel capital adequacy framework (banks are thus happy to lend).

## Advantages (III)

- This proposal addresses the core underlying problem: slowing growth and the need to stimulate it. The proposal will boost nominal GDP growth – and avoid crowding out from the bond markets.
- This is a problem as tight fiscal policy and tight credit conditions slow growth, with bank credit shrinking: Germany (-0.1%), Greece (-3.5%), Spain (-0.5%), Ireland (-14%).
- Bank credit extension adds to the money supply. From the credit model we know that the proposal will boost nominal GDP growth – and avoid crowding out from the bond markets.
- This **increases employment and tax revenues**.
- It can push countries back from the brink of a deflationary and contractionary downward spiral into a **positive cycle** of growth, greater tax revenues and falling debt/GDP.

## Prime Rate vs. Market Yield of Benchmark Bonds:

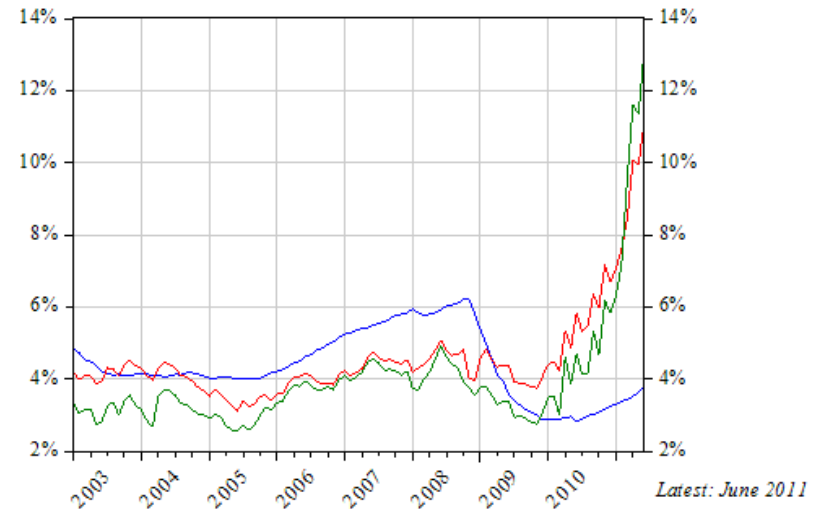
### Ireland



— Ireland Prime Rates on Existing Loans to Non-Fin. Corps., Over 5 Years Maturity (%)  
 — Ireland 10y Government Benchmark Bid Yield - Redemption Yield (%)  
 — Ireland 5y Government Benchmark Bid Yield - Redemption Yield (%)

Source: Thomson Reuters Datastream, ECB

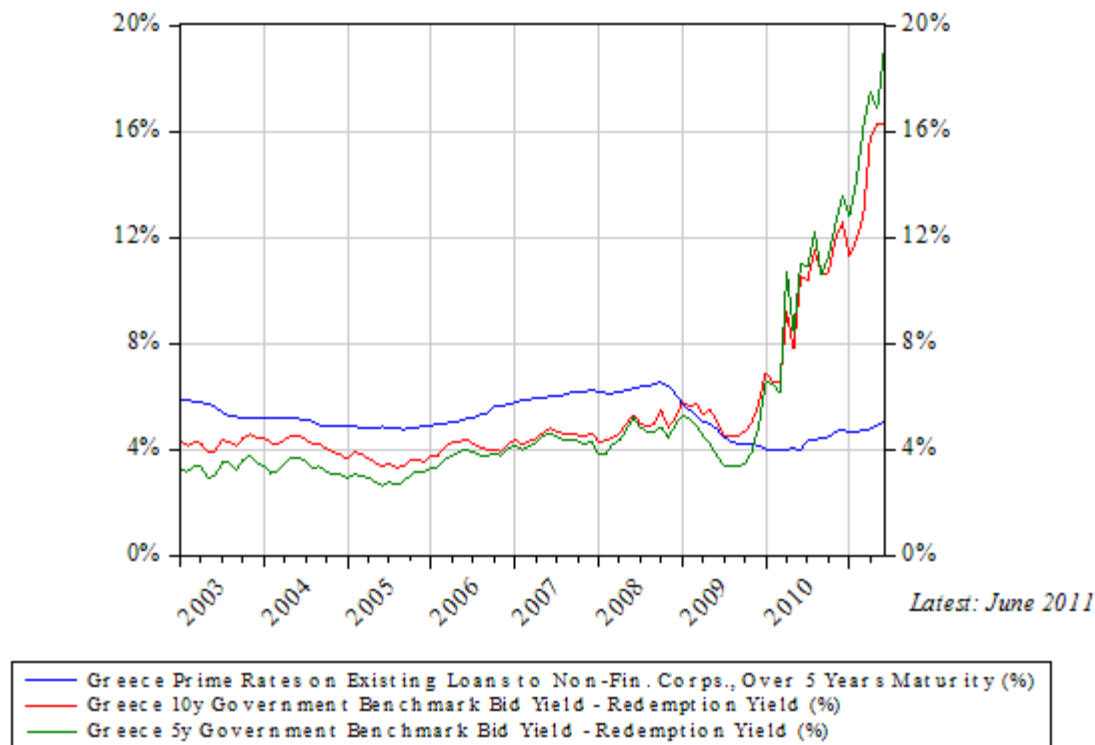
### Portugal



— Portugal Prime Rates on Existing Loans to Non-Fin. Corps., Over 5 Years Maturity (%)  
 — Portugal 10y Government Benchmark Bid Yield - Redemption Yield (%)  
 — Portugal 5y Government Benchmark Bid Yield - Redemption Yield (%)

Source: Thomson Reuters Datastream, ECB

## Prime Rate vs. Market Yield of Benchmark Bonds: Greece



Source: Thomson Reuters Datastream, ECB