

# Stable and Sustainable Development: *Mission Possible*

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**Gresham College Spring Long Finance Conference**

**City of London Corporation**

**3 May 2015**

## Dominant theories of economic policy:

1. Free trade policies will deliver economic growth and development, prosperity and economic independence
2. Free market policies are necessary and sufficient to ensure stable and sustainable economic growth and development
3. Prices are key, since they move to equate demand and supply, delivering equilibrium
4. The price of money – the interest rate – is a key macroeconomic and monetary policy tool, since lower rates stimulate growth and higher rates slow growth
5. Banks are one of many types of financial intermediaries; they are not special, so all intermediaries can be represented by bond markets in models
6. Central banks use interest rates to achieve their goal of stable prices, stable growth and stable currencies

How have the dominant theories fared in the 20th century?

**1. “Free trade policies will deliver economic growth and development, prosperity and economic independence“**

- The economic development of Africa and Latin America according to free trade policies advanced by the IMF/World Bank has not confirmed such hopes.
- The evidence is of underdevelopment, inequality and economic & political dependency

How have the dominant theories fared in the 20th century?

**2. “Free market policies are necessary and sufficient to ensure stable and sustainable economic growth and development“**

- Thoroughly contradicted by the rapid development of
  - Manchuria
  - Japan
  - Taiwan
  - Korea
  - China
  
- Their rapid economic development was based on the system of a **‘guided economy’** which uses **targeted government intervention** in the form of
  - **conscious institutional design** (reduction of shareholder influence, bank-based finance) and
  - **guidance of bank credit (window guidance)**

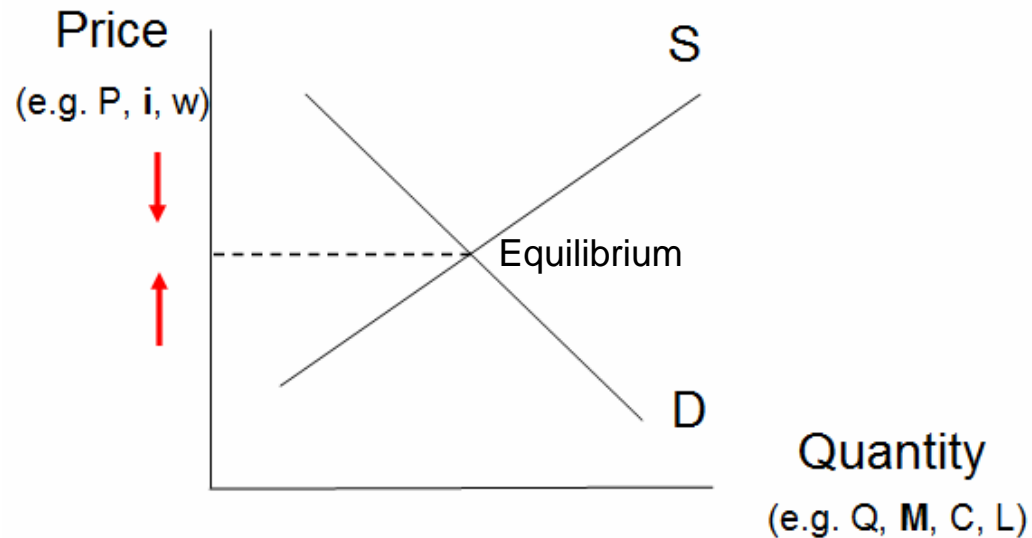
How have the dominant theories fared in the 20th century?

3. “**Prices are key, since they move to equate demand and supply, delivering equilibrium**“

- Like the other claims, this is an **assertion** based entirely on **theory**, not empirical evidence.

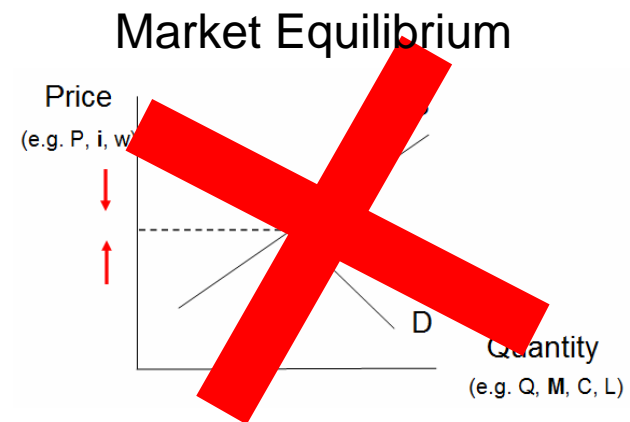
## ***Official Story: “Markets always clear and they are efficient. Hence prices are key”***

- **Assume:** 1. Perfect information; 2. Complete markets; 3. Perfect competition; 4. Instantaneous price adjustment; 5. Zero transaction costs; 6. No time constraints; 7. Profit maximisation of rational agents; 8. Nobody is influenced in any way by actions of the others.
- Then: It can be shown that markets clear, as prices adjust to deliver equilibrium.
- Hence prices are key, incl. the price of money (interest)
- Market ‘efficiency’ is a more advanced condition, requiring more assumptions to hold.



## ***Fact: Markets almost never clear***

- Assume:
  1. Perfect information;
  2. Complete markets;
  3. Perfect competition;
  4. Instantaneous price adjustment;
  5. Zero transaction costs;
  6. No time constraints;
  7. Profit maximisation of rational agents;
  8. Nobody is influenced in any way by actions of the others.
- If each assumption has a probability of 55% of being true, what is the probability of all assumptions being jointly true?
- $(55\%)^8 = 0.8\%$
- But the individual probability is much lower.
- Result: **Markets can never be expected to clear.**



***Fact:* Markets are rationed and determined by quantities.**

***Consequence:* The short side has allocation power and uses it to extract non-market benefits**

- Since we cannot expect these assumptions to ever jointly hold true, we know that there cannot possibly be market equilibrium.
- Thus all markets must be expected to be **rationed**.
- Rationed markets are determined by **quantities**, by the '**short-side principle**': Whichever quantity of demand or supply is smaller determines the outcome.
- The **short side has the power** to pick and choose who to do business with.
- This power is usually abused to extract non-market benefits.
- Think of how Hollywood starlets are selected.



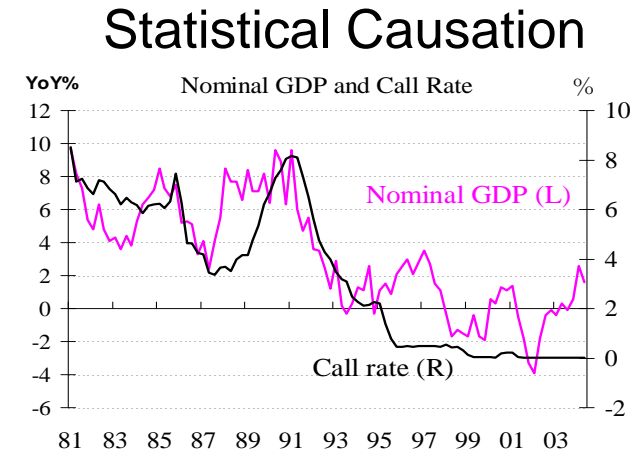
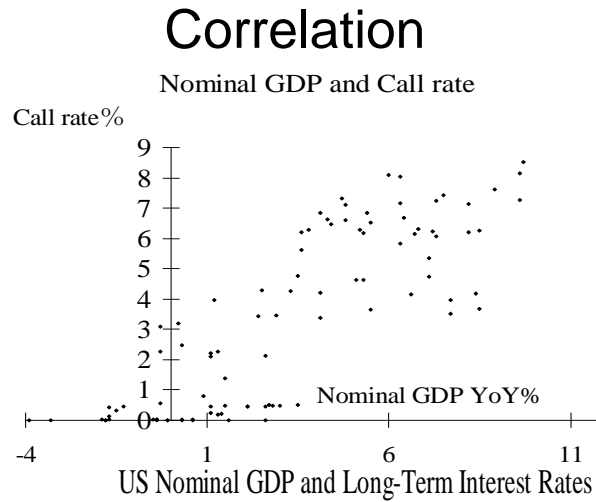
How have the dominant theories fared in the 20th century?

**4. “The price of money – the interest rate – is a key macroeconomic and monetary policy tool, since lower rates stimulate growth and higher rates slow growth“**

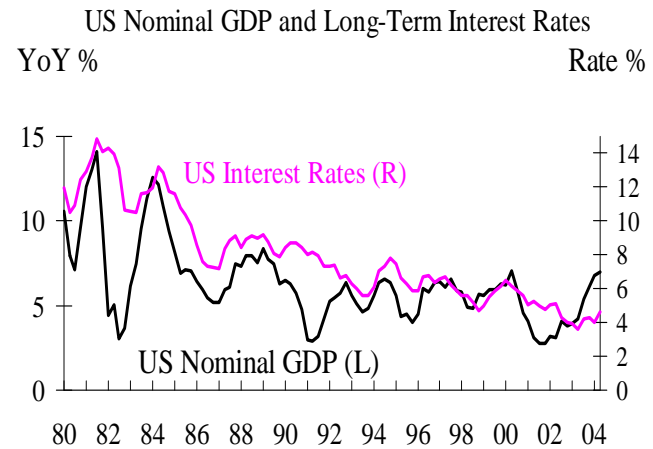
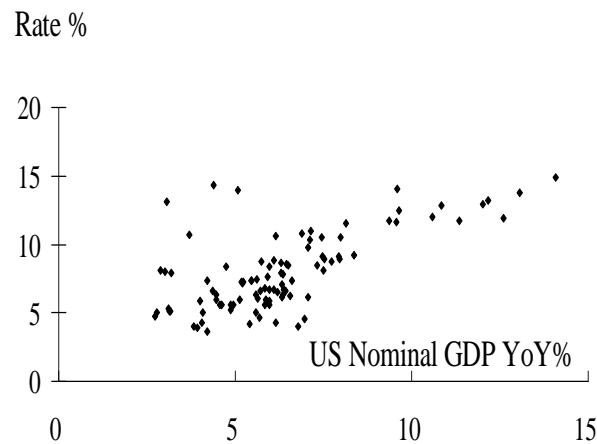
- This has been repeated so often that we assume it has been tested many times over.
- But what is the empirical evidence for this?
- There is **none**.

# The correlation and statistical causation of interest & growth

Japan



US



## ***Fact: Rates Follow the Cycle***

***Consequence: Central banks don't use rates to run the economy***

### **Official Story:**

High interest leads to low growth;  
Low interest leads to high growth

## **Cognitive Dissonance**

### **Empirical Reality:**

High growth leads to high interest;  
Low growth leads to low interest.

- Interest rates are the result of economic growth.
- So they cannot at the same time be the cause of economic growth.
- The facts contradict the official story of monetary and banking policy.
- Questions: If not rates, what then determines economic growth?  
Why do central bankers keep repeating the mantra that they use interest rates as policy tool?

How have the dominant theories fared in the 20th century?

**“5. Banks are one of many types of financial intermediaries; they are not special, so all intermediaries can be represented by bond markets in models“**

- **Thus banks are not modelled explicitly. They are left out of theories.**
- So when the 2008 financial crisis hit and journalists wanted to ask leading economists at Harvard or MIT for comment, their honest answer should have been:

„Sorry, I cannot comment on the banking crisis. None of my models and theories of the economy has ever included any banks.“

# The unknown legal realities of the banking business

- 1. Banks are not deposit-taking institutions.**
- 2. Banks never lend money.**

## The unknown legal realities of the banking business

### 1. Banks are not deposit-taking institutions.

- When a '**deposit**' is made at a bank, the customer does **not** 'have' any money 'at the bank', or 'on deposit' (i.e. held in custody by the bank).
- The money 'on deposit' at the bank is fully **owned** and controlled **by the bank**, not by the 'depositor'.
- This is because the '**depositor**' **lends money to the bank**, and becomes a **general creditor** of the bank. Hence the bank records a 'credit' on behalf of the customer in its records of its debts.

### 2. Banks never lend money (unlike firms, insurance companies, others)

- Instead, **banks acquire securities** – the 'loan contract' is a **promissory note** (like BoE notes, but without legal tender status) that the bank purchases.
- The bank *does not pay out* the money referred to in the loan contract. Instead, just as with a 'deposit', it records a 'credit' on behalf of the customer in its records of its debts.

## **Fact: What makes banks unique** **The case of a £1m loan**

**Step 1** The bank ‘purchases’ the loan contract from the borrower and records this as an asset.

Balance Sheet of Bank A

Assets	Liabilities
£ 1m	

**Step 2** The bank now owes the borrower £1m, a liability. It records this however as a **fictitious customer deposit**: the bank pretends the borrower has deposited the money, and nobody can tell the difference.

Assets	Liabilities
£ 1m	£ 1m

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

So the creditor (the bank) does not give up anything when a loan is ‘paid out’

## **Fact: How Barclays Bank invented its own capital**

**Step 1** Sept. 2008: Barclays Bank **needs £5.8bn in new capital**. It plans to issue preference shares. It finds an investor: The State of Qatar. But: Qatar is fully invested and does not want to liquidate other assets, as markets have collapsed.

**Step 2** Problem solved: Barclays lends £5.8bn to Qatar, contract signed

Barclays Bank

Assets	Liabilities
£ 5.8bn	

**Step 3** Barclays now owes the borrower £5.8bn, a liability (accounts payable).

Barclays Bank

Assets	Liabilities
L £ 5.8bn	A/C P £5.8bn



## **Fact: How Barclays Bank invented its own capital**

**Step 4** Barclays now pretends it has discharged its accounts payable liability by recording it as a ‘customer deposit’. But neither the bank nor the customer nor anyone else has made such a deposit.

Barclays Bank

Assets	Liabilities
L £ 5.8bn	A/C P – £5.8bn D + £5.8bn

**Step 5** Qatar now draws down its ‘deposit’ with Barclays, in order to purchase the newly issued preference shares: A liability swap.

Barclays Bank

Assets	Liabilities
L £ 5.8bn	<u>D – £ 5.8bn</u> E + £ 5.8bn

### **Problem solved:**

Barclays reports an **increase in its capital of £5.8bn.**

A case for the **Serious Fraud Office.**

## ***Consequence: Banks are special. They create the money supply***

- Unlike non-bank financial institutions, banks create money out of nothing.
- They do this by what is called ‘bank lending’ – better: **credit creation**. This creates bank credit and deposit money simultaneously.
- **Through this process banks create 97% of the money supply.**
- **They decide who gets newly created money and for what purpose.**
- **Banks reshape the economic landscape through their loan decisions.**
- **Now we know why central banks actually conduct their monetary policy by ‘guiding’ bank credit.**

## Recognition of Bank Credit Creation is a Game Changer for...

- Economics, finance, banking research and forecasting
- Government policy (monetary policy, fiscal policy, regulatory policy)
- Recognition of the banks' true role is the precondition for solving many of the world's problems, including
  - the problem of the recurring banking crises,
  - unemployment,
  - business cycles
  - underdevelopment and the
  - depletion of finite resources.
- **It is possible to achieve high, stable and sustainable economic development. How?**

How have the dominant theories fared in the 20th century?

6. **“Interest rates are the key tool for macroeconomic management. Central banks use interest rates to achieve their goals of stable prices, stable growth and stable currencies“**
- There is no evidence to support these claims:
- **We have not observed such stability** in major economies in the 20th century, despite such contrary claims by central banks (e.g. USA).
  - Interest rates cannot be a key policy tool, since they merely **follow** the business cycle, lagging nominal GDP growth.
  - There is **evidence that central banks have used different, more powerful monetary policy tools to achieve their true goals.**

## Case Study: The creation of the Japanese bubble of the 1980s

### ➤ **How did the Bank of Japan actually implement monetary policy?**

*Empirical research using econometric evaluation of statistical data and extensive interviews with central bankers and private sector bank staff dealing with the central bank\**

### ➤ **Result:**

#### **Official policy tools:**

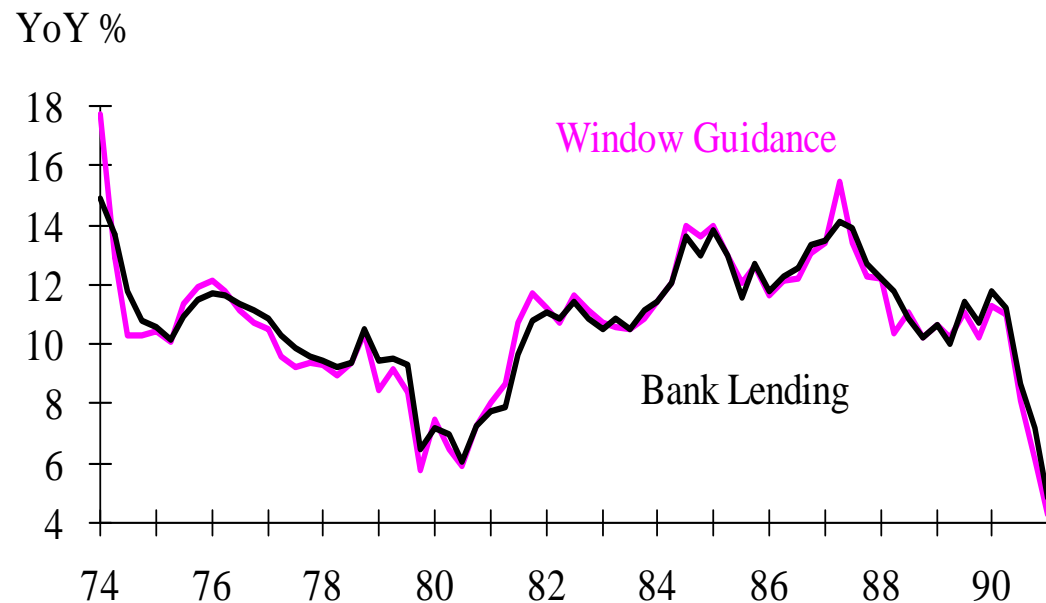
- |  |              |
|--|--------------|
| 1. Price Tool (interest rate: ODR, call rate): | not relevant |
| 2. Quantity Tool (operations, lending):        | not relevant |
| 3. Regulatory Tool (reserve ratio):            | not relevant |

\* See: Richard Werner (2003), *Princes of the Yen*  
Richard A. Werner (2002), *Asian Economic Journal*, vol. 16, no. 2, pp. 111-151, Blackwell, Oxford

## Implementation of monetary policy: What they actually do

Unofficial policy tool:      **Direct bank credit control (window guidance):**  
**no. 1 policy tool**

### Bank Lending and Window Guidance



\* See: Richard Werner (2003), *Princes of the Yen*  
Richard A. Werner (2002), *Asian Economic Journal*, vol. 16, no. 2, pp. 111-151, Blackwell, Oxford

## ‘Informal guidance’ of bank credit by central banks

- The Bank of Japan is not the only central bank to ‘informally’ control bank credit.
- This practice is known world-wide, for instance, in
  - the UK as ‘Corset’
  - Germany as ‘Kreditplafondierung’
  - the US as ‘credit controls’
  - France as ‘encadrement du crédit’
  - Korea, Taiwan, China as ‘window guidance’
  - Thailand as ‘credit planning scheme’
- Central banks know that interest rates are not much help in controlling the economy. They also know that **the quantity of credit is the key variable**. Why?

**Quantity Theory of Credit (Werner, 1992, 1997):**  
**Fact:** The allocation of bank credit creation determines  
what will happen to the economy – good or bad...

non-GDP credit

GDP credit

= unproductive credit  
creation

**Case 1: *Consumption credit***

**Result:** Inflation without growth

**Case 2: *Financial credit***  
(= credit for transactions that do not  
contribute to and are not part of GDP):

**Result:** Asset inflation, bubbles  
and banking crises

**Case 3: *Investment credit***  
(= credit for the creation of new  
goods and services or  
productivity gains)

**Result:** Growth without inflation,  
even at full employment

= productive credit  
creation



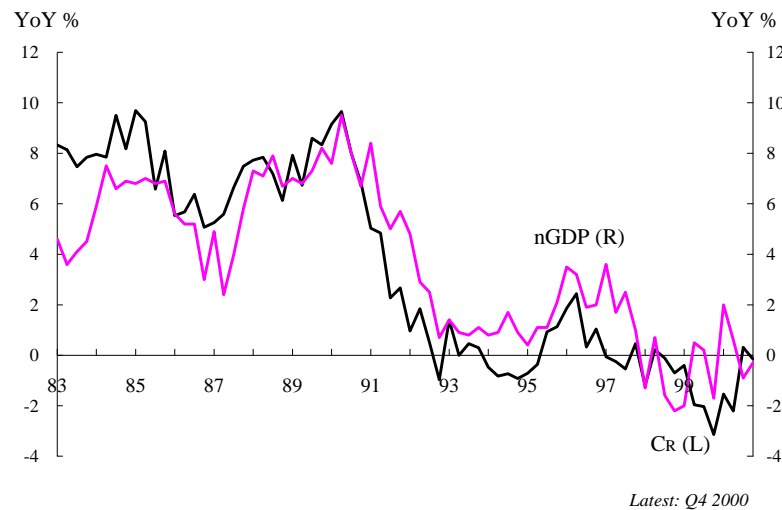
## The Quantity Theory of Credit (Werner, 1992, 1997)

$$\Delta(P_R Y) = V_R \Delta C_R$$

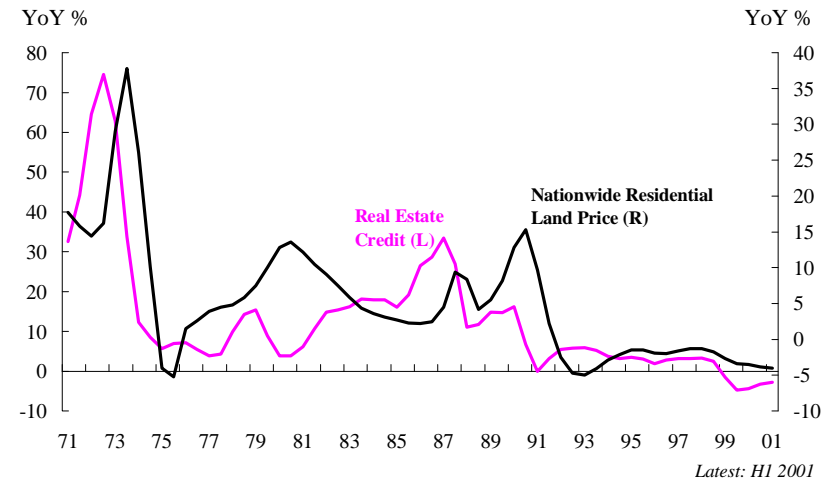
nominal GDP = real economy credit creation

$$\Delta(P_F Q_F) = V_F \Delta C_F$$

asset markets = financial credit creation



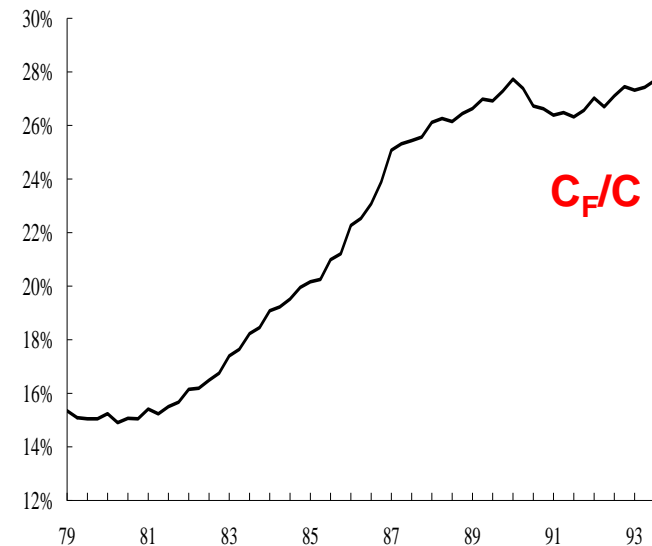
Real circulation credit determines  
nominal GDP growth



Financial circulation credit determines  
asset prices – leads to asset cycles  
and banking crises

## **Rule: Credit for financial transactions 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

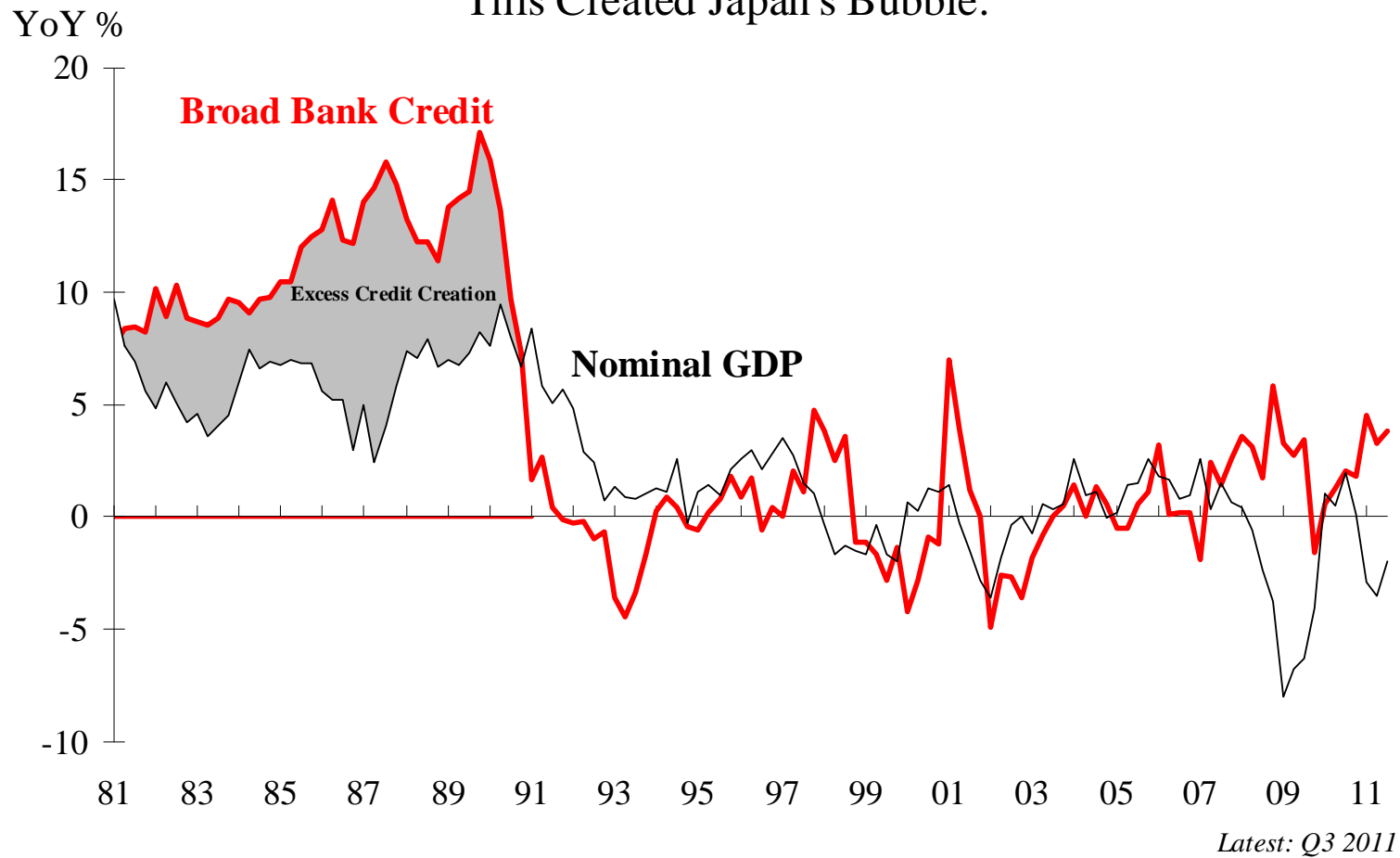


Source: Bank of Japan

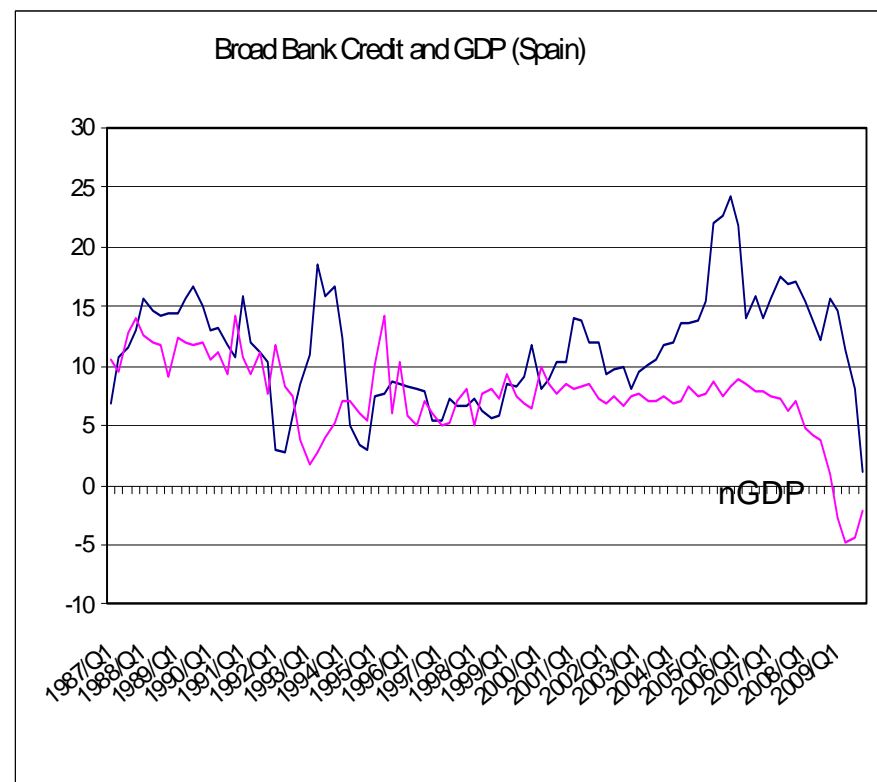
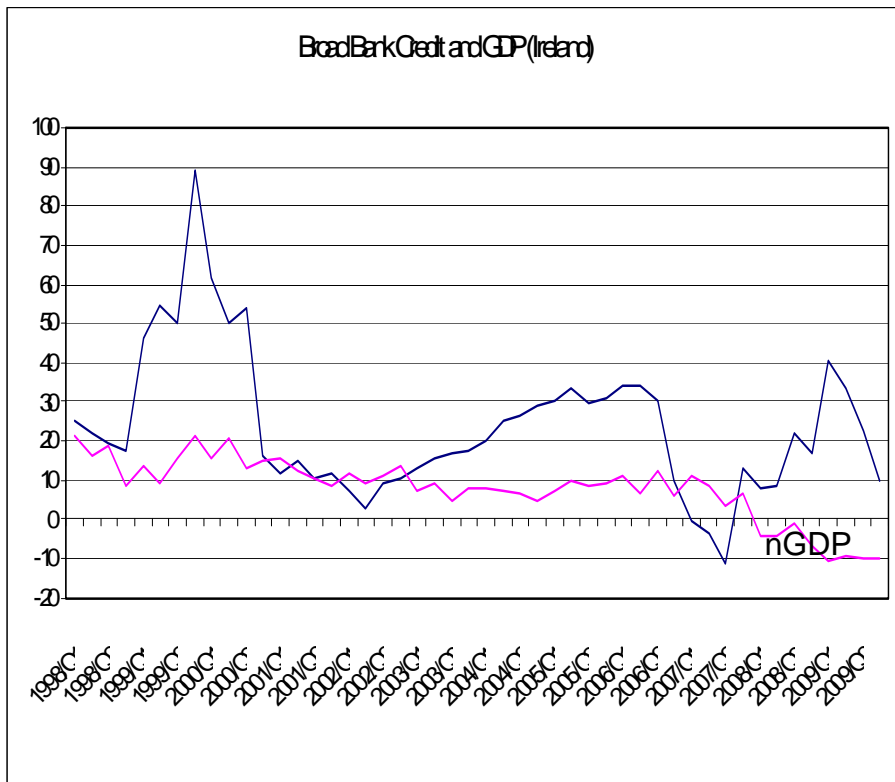
$C_F/C$  = Share of loans to the real estate industry, construction companies and non-bank financial institutions

**Rule: Broad Bank Credit Growth > nGDP Growth =  
banking crisis**

This Created Japan's Bubble.



**Rule: Out-of-control financial credit  $C_F$  creates bubbles and crises, e.g. ECB policies in Ireland, Spain, Portugal, Greece**



**Broad Bank Credit Growth > nGDP Growth**

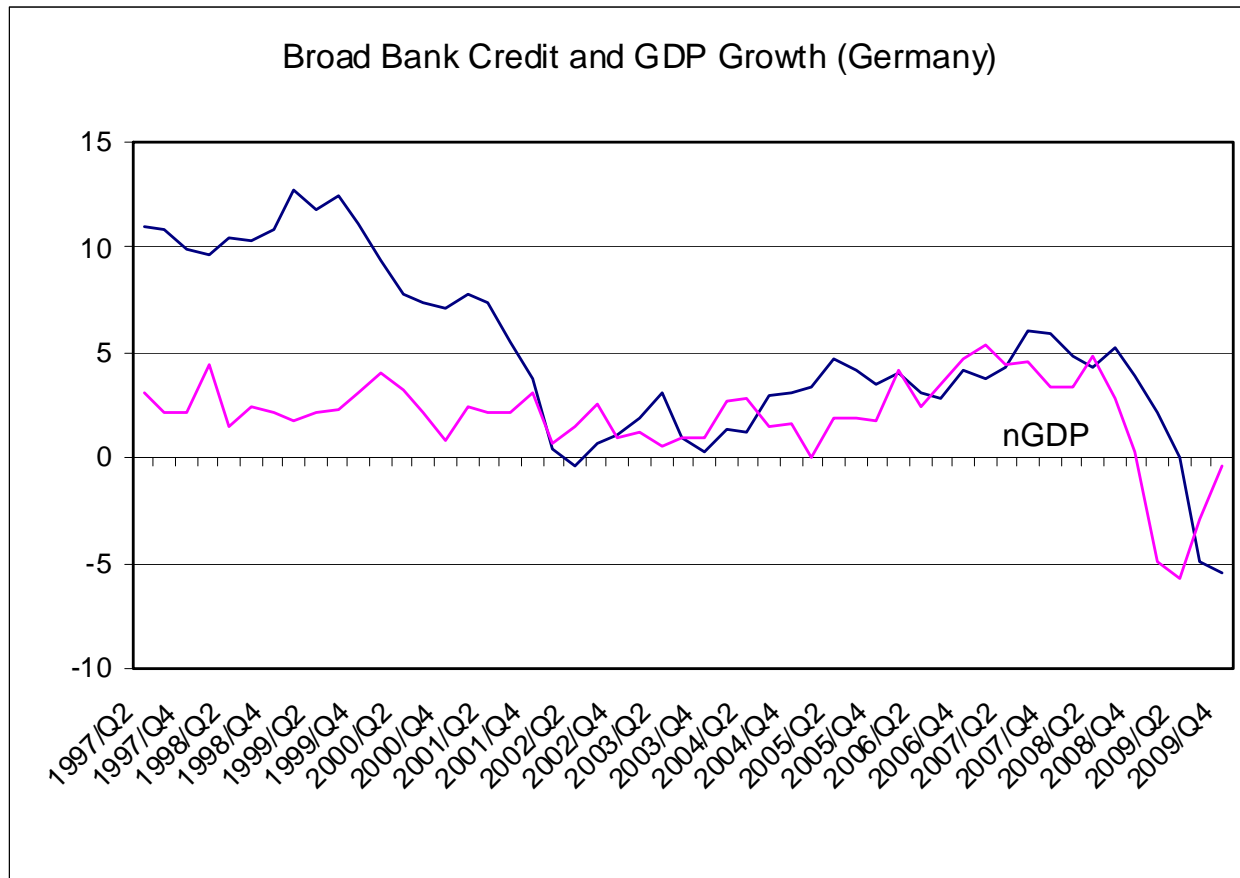
***Rule:* Concentrated banking systems are prone to recurring crises and instability**

- Banks and bankers maximise their benefits by growing quickly
- The easiest way to grow is to create credit for **non-GDP (speculative) transactions ( $C_F$ )**
- This is why we have had **hundreds of banking crises** since the 17th century, when modern banking started in London
- **The UK has one of the most concentrated banking systems of all industrialised countries: 90% of deposits with 5 banks**
- **Hence the high frequency of recurring boom/bust cycles and banking crises**

## ***The Alternative 1: Credit guidance to suppress unproductive (harmful) credit creation and encourage productive credit creation = the East Asian Economic Miracle Model***

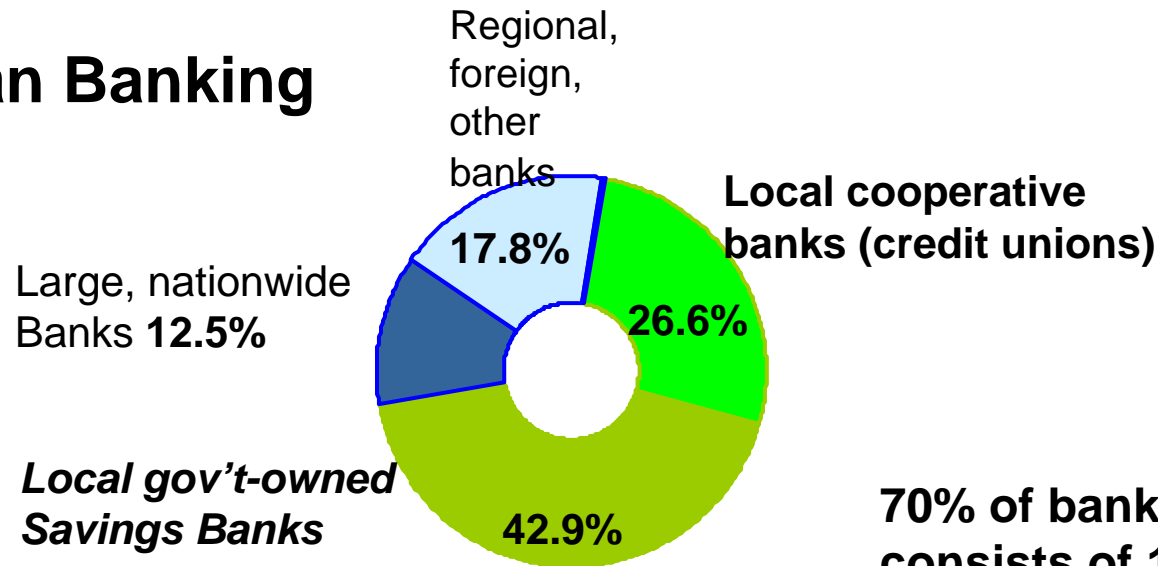
- Top-down total credit creation quota
- Allocated for **productive investments** via central bank and banking system.
- Implemented in Manchuria, Japan, Taiwan, Korea, China
- Partially implemented in Thailand, Malaysia, Singapore, Indonesia, India
- Fundamental design invented by **German Reichsbank in 1912**
- Advanced by Hjalmar Schacht in 1920s, transferred to Asia via Hisato Ichimada (key postwar Bank of Japan governor) and the Japanese **reform bureaucrats** (many with **Manchurian experience**, see *Princes of the Yen*).
- Power battle between those wanting to use this system in the **national interest** (MITI, MoF, 'reform bureaucrats' like Osamu Shimomura) versus those wanting to deploy it for **other reasons** (most 'independent' central banks)

## Alternative 2: How to Avoid Asset Bubbles & Home-Grown Banking Crises – and ensure ample funding for small firms



## ***Alternative2: A banking sector dominated by many small, local, not-for-profit banks avoids banking crises***

### **German Banking**



**70% of banking sector consists of 1,700 locally-controlled, small banks, lending mostly to productive SMEs**



## What about post-crisis policies?

### ***Fact: Crises can be ended easily, cheaply and quickly***

Compare 2 major 20<sup>th</sup> century Japanese banking crises: post-1945 and post-1991

	<b>1991</b>	<b>1945</b>
% of non-performing assets	25%	95%
Firm reliance on bank finance	45%	100%
Supply-situation in economy	very good	very bad
Length of post-crisis recession	20 years	1 year

**The difference:**

**central bank policy**

## **What were the successful Bank of Japan policies of 1945?**

- Central bank purchase of non-performing assets from banks at face value
- Credit expansion by central bank (direct lending to companies)
- Window guidance credit quota system, expanding bank credit creation.

## The Great Depression exported to Germany, then ended

- 1930: 50% of top 5-banks' deposits were US-dollar denominated call deposits
- Withdrawal of US deposits and insistence by Reichsbank and banks that firms conduct fire-sale of assets. Result: thousands of corporate bankruptcies and mass unemployment.
- Hjalmar Schacht, the Reichsbank head who had created this problem, offers a plan about how to end the Great Depression to Adolf Hitler and helps fund the Nazi party
- 1933: Chancellor Hitler. Schacht re-appointed central bank head.
- Schacht ends the recession, by taking policies to kick-start **bank credit creation**

## The Great Depression exported to Germany, then ended

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- Withdrawal of US deposits and insistence by Reichsbank and banks that firms conduct fire-sale of assets. Result: thousands of corporate bankruptcies and mass unemployment.
- Hjalmar Schacht, the Reichsbank head who had created this problem, backs the Nazi party
- 1933: Hitler appointed Chancellor. Schacht re-appointed central bank head.
- Schacht ends the recession, by taking policies to kick-start **bank credit creation**

## New Monetary Policy: Recognising the Importance of Credit Creation

- In 1991, when investment strategists became bullish on Japan, I argued that a massive banking and economic crisis was imminent (Werner, 1991, The Great Yen Illusion, University of Oxford Institute of Economics and Statistics Applied Economics Discussion Paper No. 129).
- I presented the **Quantity Theory of Credit**, disaggregating credit into
  - productive investment credit
  - unproductive consumer credit and
  - unproductive and unsustainable financial credit.
- I also argued that the emerging crisis could be ended at any time by the right policies, by **expanding credit creation for GDP transactions** - which I called '**quantitative easing**' (Nikkei, 2 September 1995).

# Werner-proposal of 1994: A monetary policy called 'Quantitative Easing' = Expansion of GDP-credit creation

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)



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経済学教授

## 景気回復、量的金融緩和から

### 総購買力を増やせ 4%程度の成長は可能

**実体経済の購買力不足**

1990年代後半、日本経済は深刻な停滞に陥り、実体経済の購買力が大幅に低下した。この購買力不足は、金融緩和だけでは解決できず、量的金融緩和による総購買力の増大が必要である。

量的金融緩和とは、中央銀行が国債や政府証券などを大量に購入し、市場に資金を供給する政策である。これにより、銀行の貸付力が向上し、企業や個人が借入しやすくなり、消費や投資が促進される。結果として、総購買力が拡大し、景気回復が期待される。

また、この政策は、金融機関の貸付率を低下させ、企業の借入コストを削減する効果も期待される。これにより、企業の収益性が向上し、雇用の創出や賃金引き上げが促進される可能性がある。



名目GDPと民間リクイディティ

実目GDP (実目M2)

## What I said would not work:

- reducing interest rates – even to zero
- fiscal stimulation not backed by credit
- expanding bank reserves/high powered money

## How to Reflate after a Banking Crisis

1. The central bank purchases all banks' non-performing assets at face value.
2. The central bank purchases assets from non-banks as short-term liquidity measure, ensuring stability of the financial system

If bank credit creation remains weak:

3. The government stops the issuance of gov't bonds & borrows from banks:  
**Enhanced Debt Management**

## Drawbacks of Central Bank Independence

- In 1997, I wrote to all members of parliament to ask them not to give greater powers and independence to the Bank of Japan as it was likely to abuse these powers **to prolong the recession**.
- In my book *Princes of the Yen* (Japanese: 『円の支配者』、2001; English: 2003) I argued that the Bank of Japan was purposely **prolonging the recession** in order to push through **a structural transformation** of the economy, and thus this overly independent central bank needed to be stopped.
- As adviser to the LDP's Central Bank Reform Group in 2001-2003 I pushed for making the Bank of Japan legally **accountable**.
- **So far, the Bank of Japan has not implemented true QE: bank credit growth remains stagnant**



## But Ben Bernanke Listened

- In 2009, the former Fed chairman insisted he had **not adopted BoJ-style** ‘Quantitative Easing’ i.e. reserve expansion
- Instead, he was doing something else. He adopted my **true QE policy advice**:
  1. The Fed purchased non-performing assets from banks, at high prices.
  2. The Fed purchased assets in the markets, massively increasing liquidity.
- Ben Bernanke called this ‘**credit easing**’ – in line with my original definition of ‘quantitative easing’, not misinterpreted by the Bank of Japan
- As a result, US **bank credit recovered sharply**, and thus so did the economy.
- In Japan, and in the eurozone, an additional policy is needed:  
**Enhanced Debt Management**

## Enhanced Debt Management applied to the 'European Sovereign Debt Crisis'

- Fiscal positions could look much stronger today if the economically most efficient method of responding to banking crises had been adopted: **central bank purchases** of all non-performing assets at face value (zero cost to society and tax payers).
- So far policy-makers have failed to 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**.
- But how to meet the public sector borrowing requirement?

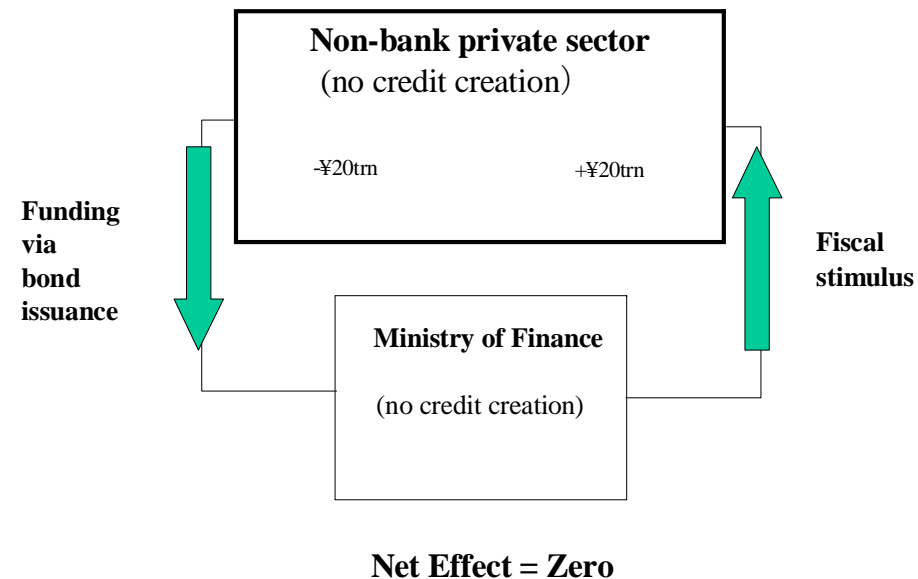
## EDM: The solution that maintains the euro and avoids default

- Central bank purchases of bonds is not a good solution.
- This pumps credit creation into financial markets, fuelling an asset bubble. It is unsustainable credit for financial circulation ( $C_F$ ).
- But why use ECB funding? 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% - about 3.5%.

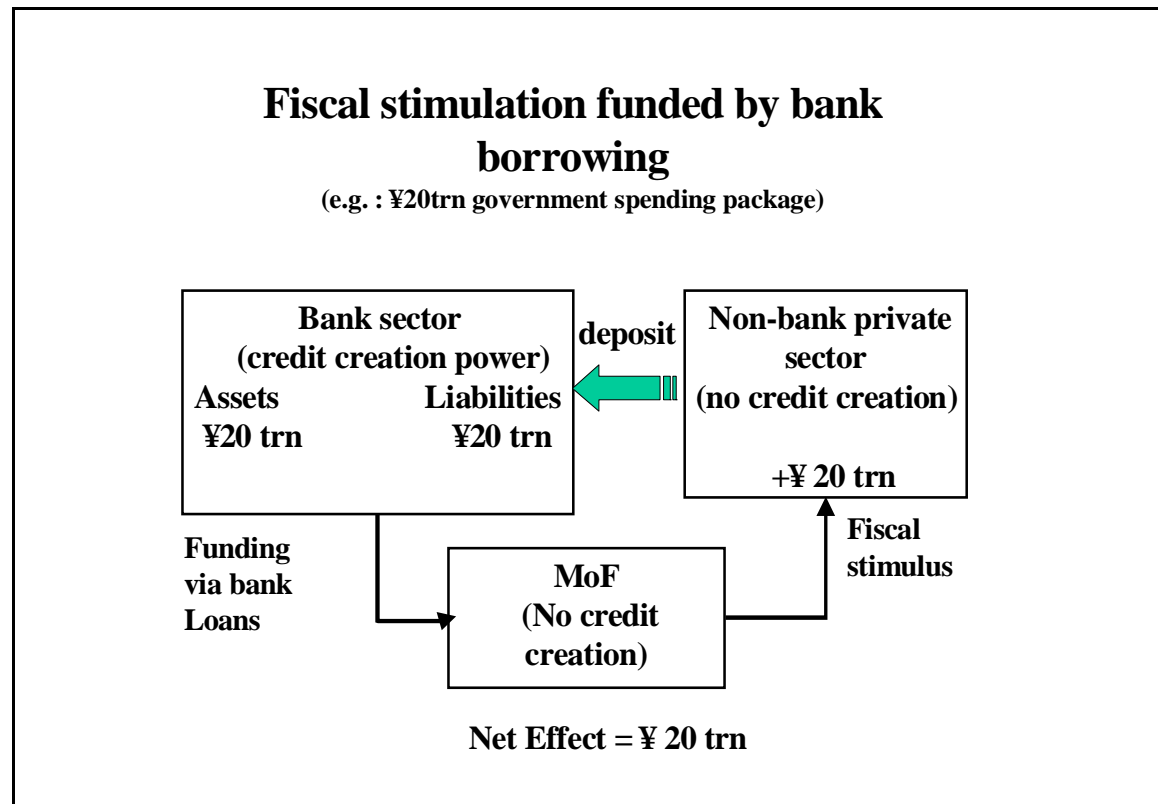
## Why fiscal spending programmes alone are ineffective

### Fiscal stimulation funded by bond issuance

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



## How to Make Fiscal Policy Effective: Enhanced Debt Management



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

### Advantages of Enhanced Debt Management (EDM):

- No increased spending or government debt needed.
- Increased credit creation, increased money used for GDP-transactions, not financial speculation -> rising nominal GDP
- Increased tax revenues
- Lower deficit/GDP and debt/GDP ratios
- A decline in unemployment, a sustainable economic recovery
- Banking sector gets healthier, is able to grow out of its problems, rebuild balance sheets
- Less need for central bank money injections into banking system
- Lower fund raising costs (no underwriters' fees)

## Advantages of this Proposal

- **Enhanced Debt Management:** according to Basel capital adequacy framework, banks will create the credit/money out of nothing, **without needing capital, expanding the money supply and nominal GDP**
- **Enhanced Debt Management:**  
**Instead of governments injecting money into banks, *banks give money to governments.***

## Fact-Check: Is the official central bank story true?

1. ~~"Central banks aim at price, economic and currency stability."~~
2. ~~"To do this, they use interest rates as the main monetary policy tool."~~
3. ~~"Interest rates are the key variable driving prices, exchange rates, growth, stock markets and bond markets."~~

- The evidence suggests that central banks are the single biggest source of macro and systemic risk in the economy.
- Central bank 'independence' has created a major new risk:  
**Central Bank Risk**



## Did some warn about **central bank risk**?

- “ Central banks now pursue their own political agendas, which may include the intentional creation of vast bubbles and downturns.”

“**Central Bank Risk** is the risk of the intentional creation of price, output and currency swings by central banks. Central Bank Risk has increased significantly over the past decade – it is now at a historically unprecedented level.”

Richard Werner (**2002**) in: *The Spectre of Central Bank Risk*

## Was the financial crisis really unpredictable?

Richard Werner (2001) in: *Princes of the Yen* (Japanese ed.)

- “Instead of trying to slow down US growth and US asset prices, Greenspan’s Fed has been fuelling the flames with a historic expansion of its own credit creation and by encouraging commercial banks to keep creating more money.”
- “Alan Greenspan knows that the **economic dislocation** that will **follow his bubble** will let previous post-war economic crises pale by comparison.
- “Individual savers will lose their money. ...Large losses will be incurred by most Americans, when the Fed changes its policy and sharply and consistently reduces credit creation, as it ultimately will. ...As individual wealth collapses, demand shrinks sharply. Companies will not be able to sell their products. Bankruptcies will rise. Bad debts at banks will rise. Credit will shrink. Deflation will expand.”

## Was the financial crisis really unpredictable?

- Richard Werner (2005) in: *New Paradigm in Macroeconomics*

“...banking systems are **prone to credit cycles** that affect macroeconomic stability.... a lesson presently relevant for the UK housing sector.”

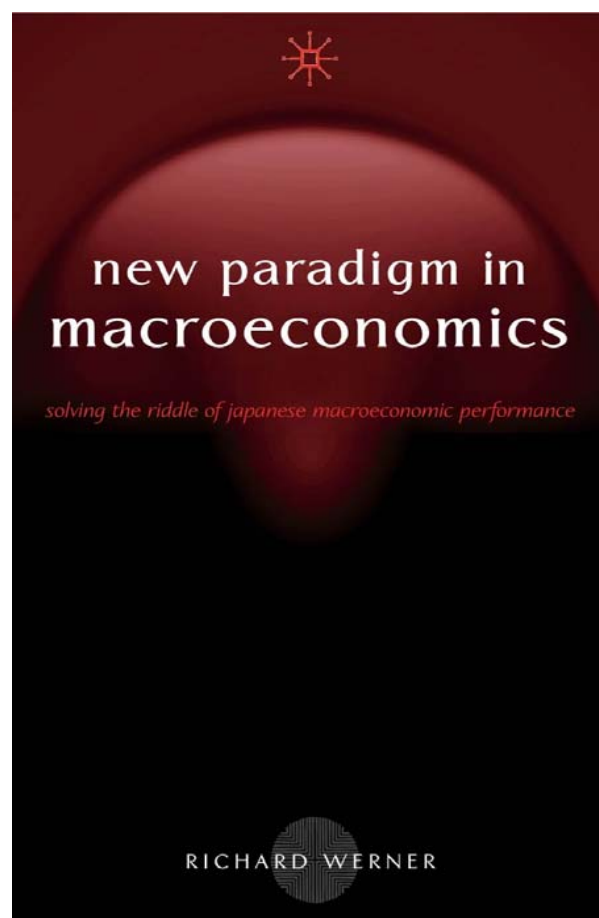
- Richard Werner (2003) in: *Princes of the Yen*

“We must conclude that there is a danger that the incentive structure of the staff at the ECB is not sufficient to guarantee optimal economic policies. ...The ECB is not modelled on the virtuous Bundesbank.... The creators of the ECB revived the corpse of the unaccountable Reichsbank.

As long as central bankers continue to exert unchecked control over the **quantity of credit and its allocation**, they are the undisputed **rulers** of the economy. If they have such powers, they are likely to use them. This probably means **the continuation of the boom-and-bust cycles engineered by central banks in the pursuit of their goals**. And these goals may be quite different from what we may naively assume. As long as there is no meaningful accountability, people’s lives are but puppets in their credit game.

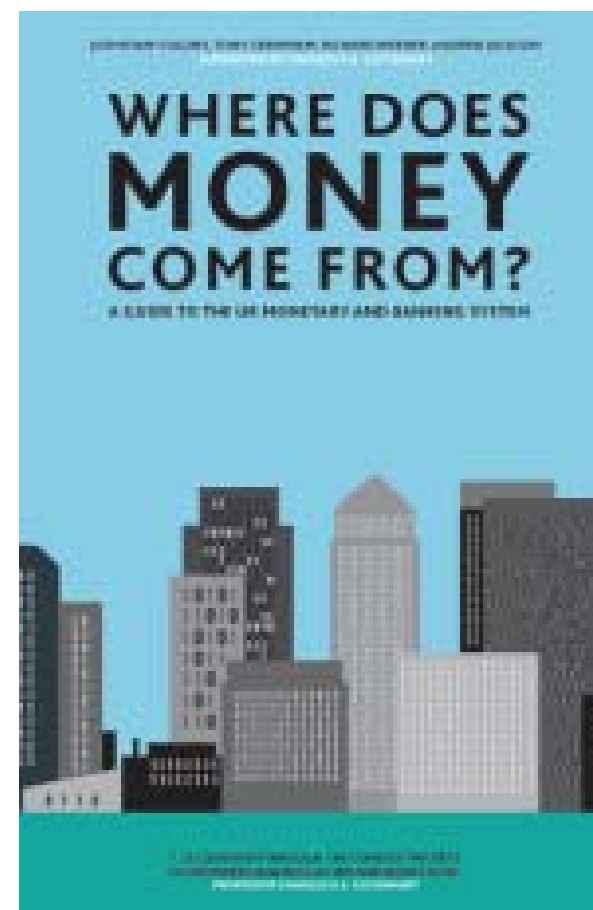
## ***Hypothesis: The job of central banks is to create cycles***

- Legal independence of central banks has increased significantly in the past 30 years world-wide.
- Central banks are more powerful than ever before in history.
- They can choose their tools, instruments and often also their policy goals.
- The principle of **Revealed Preference** (Samuelson, 1939) indicates that central banks are choosing to create massive cycles. Why?
- **Theory of Bureaucracy:** Policies are taken by bureaucracies to perpetuate their power. **Central banks increase their power through business cycles.**
- After each crisis, they demand greater powers still, which is always granted:  
**Regulatory Moral Hazard**
- **Central banks urgently need to be made accountable to democratic institutions in order to ensure the creation of stable and sustainable economic development without crises and unemployment.**

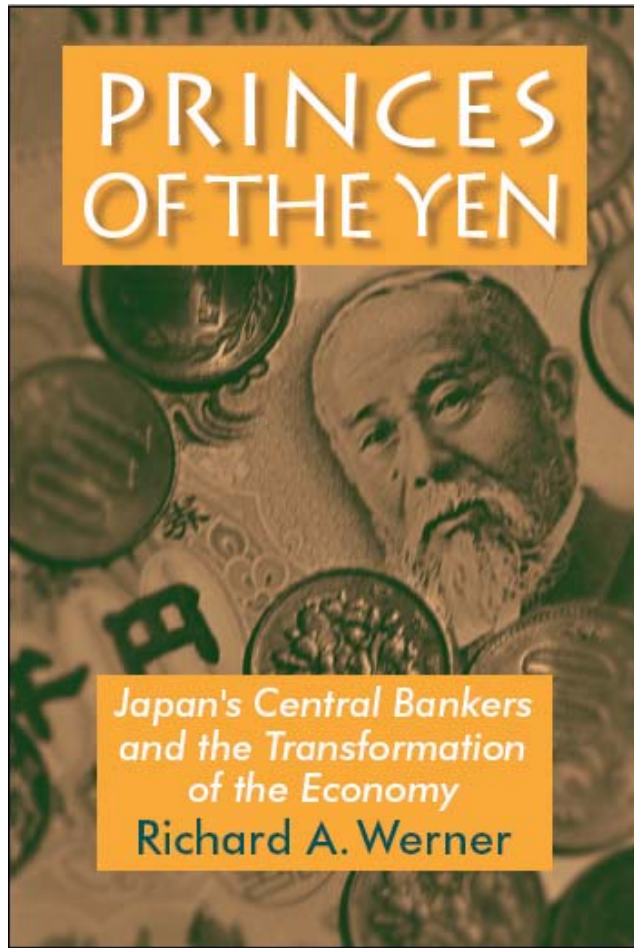


Basingstoke: Palgrave Macmillan, 2005

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New Economics Foundation, 2012



## Princes of the Yen the Movie is Out

Youtube:

Princes of the Yen film

M. E. Sharpe, 2003

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