

Scientific Macroeconomics & The Quantity Theory of Credit

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Invited Contribution for the Workshop

Real analysis versus monetary analysis: Does it matter and what are its main implications for macroeconomic theory and policy?

**Österreichische Nationalbank
Wien**

There had been many “anomalies” in finance, banking & monetary/macroeconomics

1. Why are banks are special?
2. Why do we witness recurring banking crises?
3. What is the link between money/finance/banking & the economy?
(**velocity decline**)
4. What **is** money and how can we measure it?
5. Why are interest rate policies often not effective?
6. Why is fiscal policy often not effective?
7. What determines asset prices?
8. Why have Germany, Japan, Korea, China grown so fast without free markets?
9. Why have many developing countries failed to develop?

3. What is the Link between Money and the Economy?

- Classical Economics **MV=PY**; price of money (i)
- Keynesian Economics **MV=PY**; price of money (i)
 - IS-LM Synthesis
 - Phillips Curve
- Monetarism **MV=PY**; price of money (i)
- New Classical Economics **MV=PY**
 - Rational Expectations (no money), price of money (i)
 - Real Business Cycle/ Supply-side
- Fiscalism / Post-Keynesianism **MV=PY**, price of money (i)
- New Monetary Policy Consensus (Woodford, 2003) M does not matter; price of money (i) is key

Anomaly No. 3: The relationship between Money and the Economy ‘broke down’

Conventional theory assumed that all money is used for GDP transactions.

Effective Money = nominal GDP

MV = PY

with constant or stable V

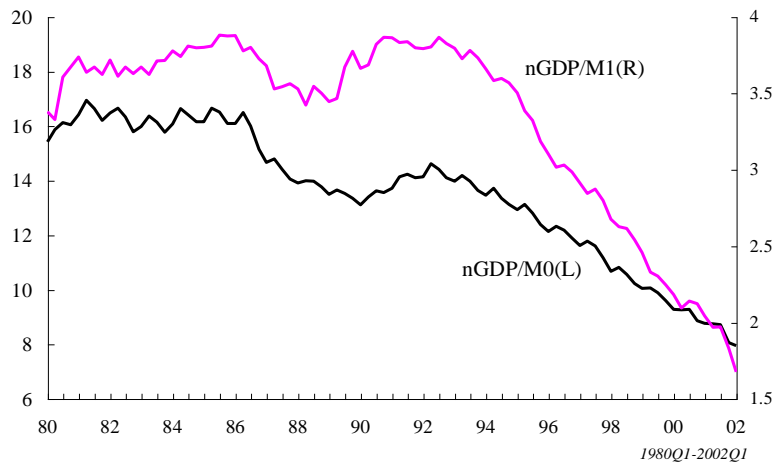
“an identity, a truism” (M. Friedman, 1992)

“valid under any set of circumstances whatever” (Handa, 2000)

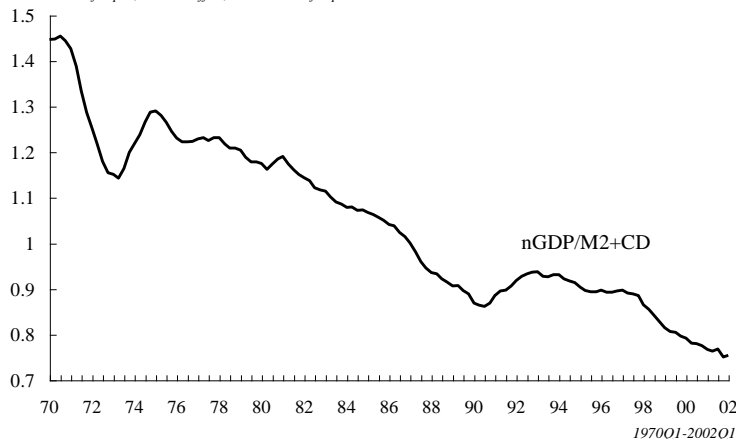
Really?

Anomaly No. 3:

The relationship between Money and the Economy 'broke down'



Source: Bank of Japan, Cabinet Office, Government of Japan



$$MV = PY; \quad M^d = kPY \\ (V \text{ const.}; k \text{ const.})$$

But by the mid-1980s:

- **Velocity V declined**
- **'Breakdown of the money demand function'** in Japan, US, UK, Scand., Asia
- **'Mystery of the missing money'**
- A world-wide "puzzling" anomaly (Belongia & Chalfant, 1990).
- The quantity relationship "came apart at the seams during the course of the 1980s" (Goodhart, 1989).

3. The “Anomaly” of the Velocity Decline

The textbook link between money & the economy: $MV = PY$; $M^d = kPY$
(V const.; k const.)

- Standard deposit aggregates (M0, M1, M2, etc.) are not in a reliable relationship with economic activity (‘velocity decline’)
- Once viewed as “a pillar of macroeconomic models”, the quantity equation “is now ... one of the weakest stones in the foundation” (Boughton, 1991).
- Attempted explanations only raise further puzzles: if the velocity decline is due to **financial deregulation and liberalisation**, should this not *increase*, instead of reducing the velocity?
- This means most of the mainstream macroeconomic theories that include money do not work. As **a result, the moneyless real business cycle and DSGE models have become dominant.**

Five Steps to Explain Many ‘Anomalies’ and Formulate Successful Macro Policies

I. Common Feature: The **deductive (hypothetico-axiomatic)** research methodology of equilibrium economics.

The **alternative:** The **inductive research methodology (common in the sciences)**.

II. Empirical evidence on key issues: What makes banks special? Which of the 3 banking theories is correct? What is money and how can we measure it?

III. Macro-Finance: Incorporating Banking into Macroeconomics –
The Quantity Theory of (Disaggregated) Credit

IV. Policies to prevent banking crises and ensure high and sustainable economic growth

V. Post-banking crisis stimulation policies: The original **Quantitative Easing** and
Enhanced Debt Management

I. Research Methodology

There are two approaches to research methodology:

- the empiricist approach, aka the **inductive methodology**;
- the axiomatic approach, aka the **deductive approach**.

Definitions:

inductive

“characterized by the inference of general laws from particular instances.”

Source: *Compact Oxford English Dictionary*

deductive or axiomatic method:

“In logic, the procedure by which an entire science or system of theorems is deduced in accordance with specified rules by **logical deduction from certain basic propositions (axioms)**, which in turn are constructed from a few terms taken as primitive. These terms may be either arbitrarily defined or conceived according to a model in which some intuitive warrant for their truth is felt to exist.”

Source: *Britannica Concise Encyclopaedia*

Which approach is most widely used in the sciences?

- This is an empirical question. Using the inductive approach, we can observe what scientists actually do.
- Historically, many scientists have followed the steps below:
 1. Careful **observation** of a set of natural phenomena
 2. During observation, the material is **organised in categories** and classifications.
 3. Observation of certain **patterns and associations** of the data.
 4. Reflection leads to a characterisation of the observed phenomena. The characterisations are **explanatory theories**.
 5. The explanatory theories can be revised or rejected in the light of new facts that emerge or are collected.
- This process is widely accepted in the **sciences**. It is called '**inductive reasoning**'.

Methodology in Economics: The Deductive Method

I. Axiom: Individual 'rational' utility maximisation

People lack individual personality, are **rational**, and **selfish-autistic**, so do not care about others at all, are never influenced by others, and mainly want to maximise their own consumption and accumulate goods and wealth.
(Billions in advertising spending wasted!)

II. Assumptions:

3. Perfect, symmetrically distributed information
4. Complete markets
5. Perfectly flexible, instantly adjusting prices
6. Perfect competition (no oligopolies or monopolies, everyone a price-taker)
7. Zero transactions costs
8. Infinite lives, no time constraints; others

- A theoretical dream world is constructed, which is, by definition, 'optimal'
- In such a world, markets are **defined to be efficient and perfect**.
- Any **intervention** must thus **by definition** be less than optimal.

Methodology in Economics: The Deductive Method

- The **deductive approach** is **less concerned with empirical reality**.
- Karl Popper recognised that a researcher may adopt an ‘**immunizing stratagem**’, “**to guard his theory against being falsified**”.
- This is a problem **especially in the deductive approach**, which is prone to **immunisation** and abuse by ‘**reverse engineering**’:
- **Steps**
 1. **Start** with your **preferred conclusion**: what do we **want to ‘prove’** or conclude?
E.g. gov’t intervention is bad; big business is good, should have unlimited control in society
 2. Identify how a model would have to be formulated **in order to conclude** as in 1.
 3. Identify the assumptions **needed to justify** the model in 2.
 4. Identify the general axioms that might help **justify** the above.
 5. **Finally**, the most **important step**: **present the above in reverse order.**

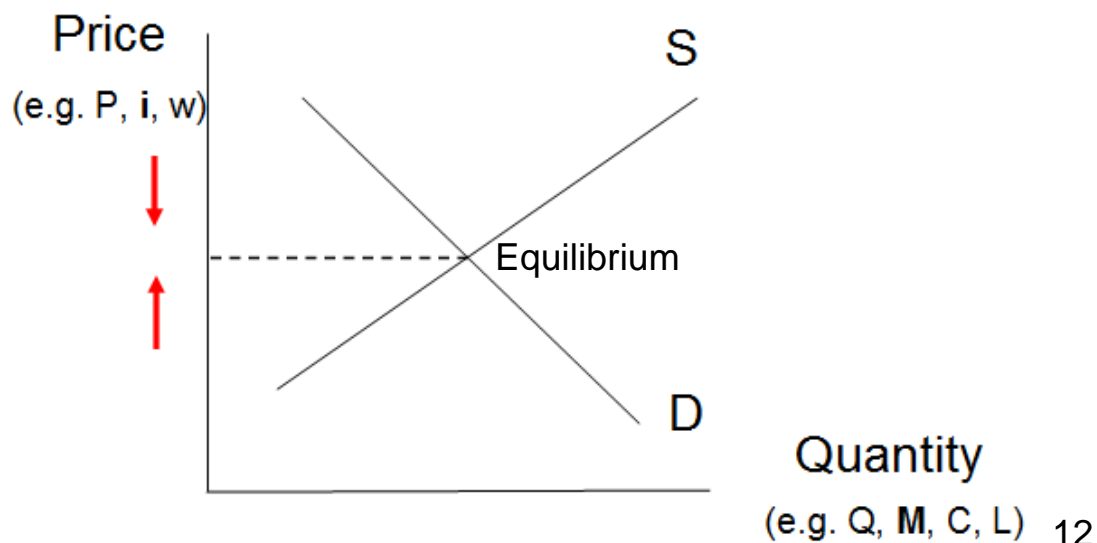
This is wholly **unscientific**

The Concept of Equilibrium: Where does it come from?

Theory: Markets always clear and they are efficient.

- 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.

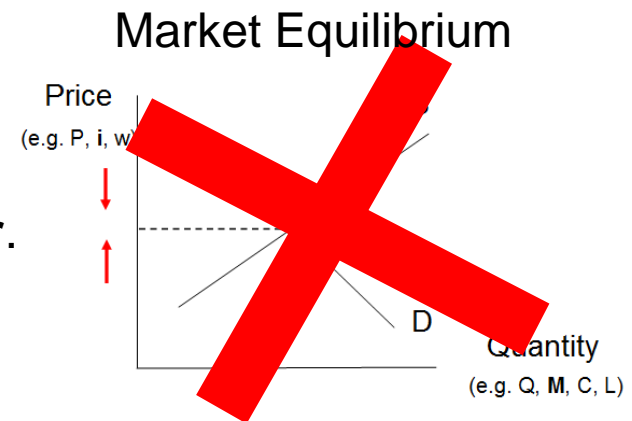
- Hence prices are key, incl. the price of money (interest)



Equilibrium

Fact: We cannot expect markets to 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.**



Rationing: Core of the New Paradigm

- If only one of the many assumptions does not hold, **markets do not clear**.
- Economics must recognise **pervasive disequilibrium as the dominant state**.
- What happens when markets do not clear (i.e. always)?
- **Demand does not equal supply. Markets are rationed.**
- Rationing in one market affects other markets.
- In our world, **information, time and money** are rationed.
- Thus practically **all** markets must be expected to be rationed.
- Rationed markets are determined by **quantities**, not prices.
- The outcome is determined by **whichever quantity of demand or supply is smaller** (the '**short-side principle**')

Markets are rationed & determined by quantities

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

- The '**short-side principle**' also reveals: 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 Hollywood
#metoo
- What about **money**? What is the **short side**? What is larger: supply or demand?
- Who supplies most of our money?

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II. The Three Theories of Banking and the Evidence

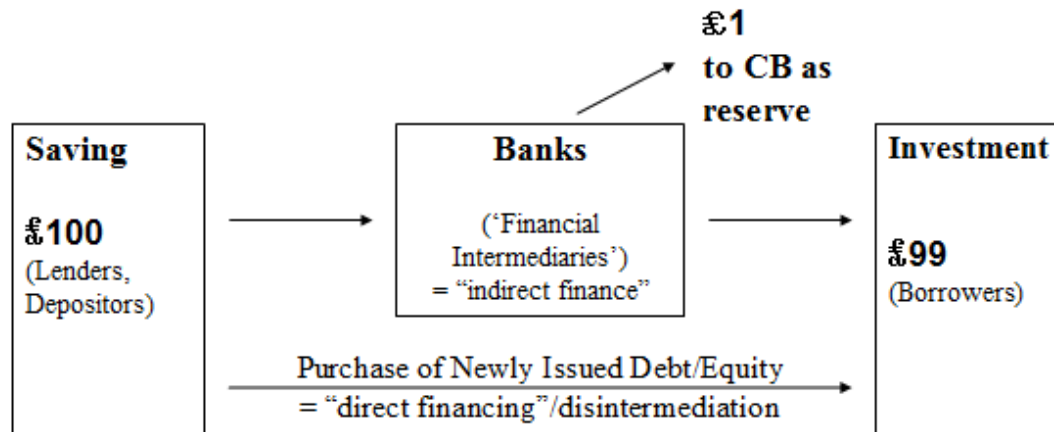
Theories of Banking and the Economy

1. The Financial Intermediation Theory
2. The Fractional Reserve Theory
3. The Credit Creation Theory

Which one is correct?







- **They differ in the question of where the money for a new bank loan comes from.**

Textbook Representation of Banks as Mere Intermediaries



- “Banks gather deposits (savings) first and then hand out this money to borrowers”
“Banks act as mere intermediary agents.” (*Financial Intermediation Theory*)
- “Banks put a reserve aside with the central bank. New loans are extended out of new reserves.” (*Fractional Reserve Theory*)

The Three Theories of Banking:

Theory of Banking	Period of dominance	Source of loan money	Banks create money individually	Banks create money collectively	Corresponding approach to bank regulation
Financial Intermediation	since 1960s	Deposits			Capital adequacy (Basel I, II, III)
Fractional Reserve	about 1920s to 1960s	Reserves			Reserve requirements
Credit Creation	until about the 1920s	----- (<i>ex nihilo</i>)			Credit growth quotas ('credit guidance')

Applying the inductive method: conducting an empirical test

- There had not been an **empirical test** of the 3 theories of banking
- First empirical tests: Werner (2014, 2016):

Theory of Banking	Claimed source of loan funds	Empirical finding
Financial Intermed.	deposits	rejected
Fractional Reserve	reserves	rejected
Credit Creation	created <i>ex nihilo</i>	consistent with evidence

- Concl.: Banks are quite special: **they create 97% of our money supply.**
- Theories and models **not reflecting this can't** be used to describe our economies.

***Economists:* Banks are deposit-taking firms that lend money**
***Legal reality:* Banks don't take deposits & don't lend money**

Banks do not take deposits. They borrow: At law, 'deposits' are loans to the bank.

- When a 'deposit' is made with a bank, the money is not 'on deposit' (i.e. held in custody by the bank). It is owned & controlled by the bank, not 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**.

Banks don't 'lend' money (unlike firms, insurance companies, others).

- They **purchase securities** – the 'loan contract' is a **promissory note** (like BoE notes, but without legal tender status) that the bank acquires.
- **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 own debts to the public**. We use this as 'money' (Werner, 2014b).

Trade Secret: What makes banks unique

The case of a £1,000 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
£ 1,000	

- Step 2** The bank now owes the borrower £ 1000, 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
£ 1,000	£ 1,000

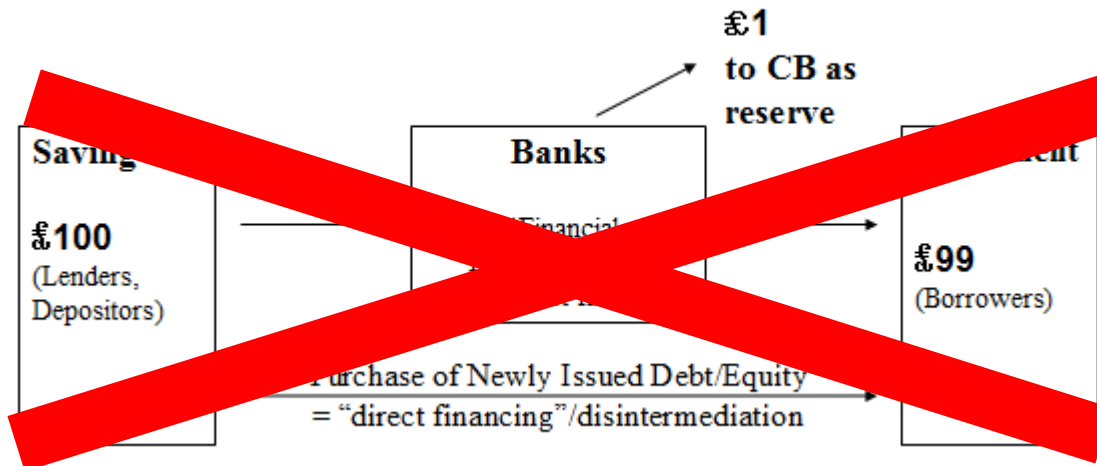
**NB: No money is
transferred from
elsewhere**

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

Empirical evidence: Banks are not financial intermediaries

- Scholars finally discover **where money comes from**:
- **97% is created by banks (not financial intermediaries)** when they extend credit ('lend')

Textbook Representation of Banks as Mere Intermediaries



Banks are special. They create the money supply

- Unlike non-bank financial institutions, **banks create money**.
- They do this by what is called 'bank lending': **credit creation**.
- Bank credit and deposit money are created simultaneously.
- **Credit creation is a unique measure of money** as it is injected into the economy, and that can be **disaggregated by the use** the new money is put to.
- **Banks 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 often conduct their true monetary policy by **'guiding' bank credit**.

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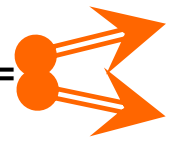
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III. Introducing the Reality of Bank Credit Creation in Macro-Models (Macro Finance) is a Game Changer for...

- government policy (monetary policy, fiscal policy, regulatory policy)
- **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.
- achieving **high, stable and sustainable economic development. How?**
- **solving the many puzzles and 'anomalies' in macroeconomics**

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

This is how banks' decisions reshape the economic landscape:

Total new credit money $\Delta C =$ 

$$\begin{array}{l} \Delta C_F \rightarrow \Delta(P_F \times Q_F) \\ + \\ \Delta C_R \rightarrow \Delta \text{nom. GDP} \end{array}$$

$C_F V_F = (P_F \times Q_F)$ **Asset Markets**

$C_R V_R = (P_R \times Y)$ **Real economy**

If banks create credit (money) and allocate it for
non-GDP transactions:

1. financial/asset transactions (C_F), this affects asset prices and is, in aggregate and if large, never sustainable (banking crises, income and wealth inequality).

the 'real economy' (GDP transactions):

2. consumption purposes, this creates **consumer price inflation** (unsustainable).
3. productive purposes (productivity enhancement, technology-implementation, value added generation), the result will be **sustainable growth without inflation** and with a more equal income and wealth distribution: Money is allocated for productive, sustainable work, producing **income streams**, not speculation (at best producing capital gains).

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

non-GDP credit

= unproductive credit
creation

Case 1: Financial credit
(= credit for transactions that do not
contribute to and are not part of GDP):
Result: Asset inflation, bubbles
and banking crises

GDP credit

Case 2: Consumption credit
Result: Inflation without growth

Case 3: Investment credit
(= credit for the creation of new
goods and services or productivity
gains that generate income)
Result: Growth without inflation,
even at full employment

= productive credit creation

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

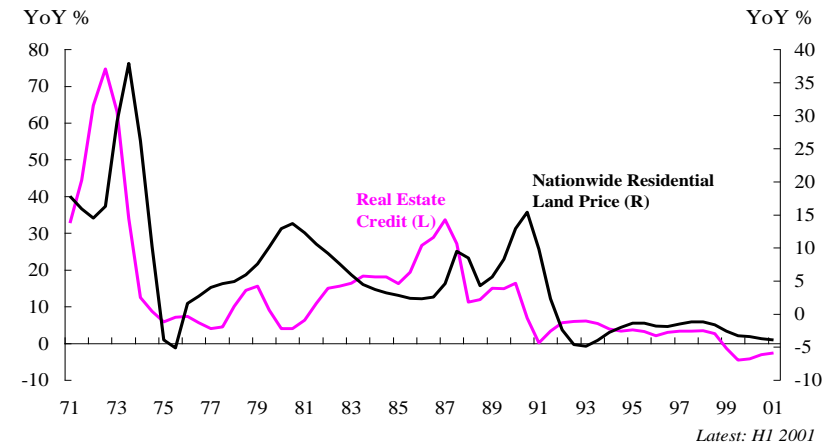
$$C = C_R + C_F$$

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

nominal GDP 'real economy credit creation'

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

asset markets financial credit creation



Empirical result of GETS methodology:
'Real economy credit' determines nominal
GDP growth

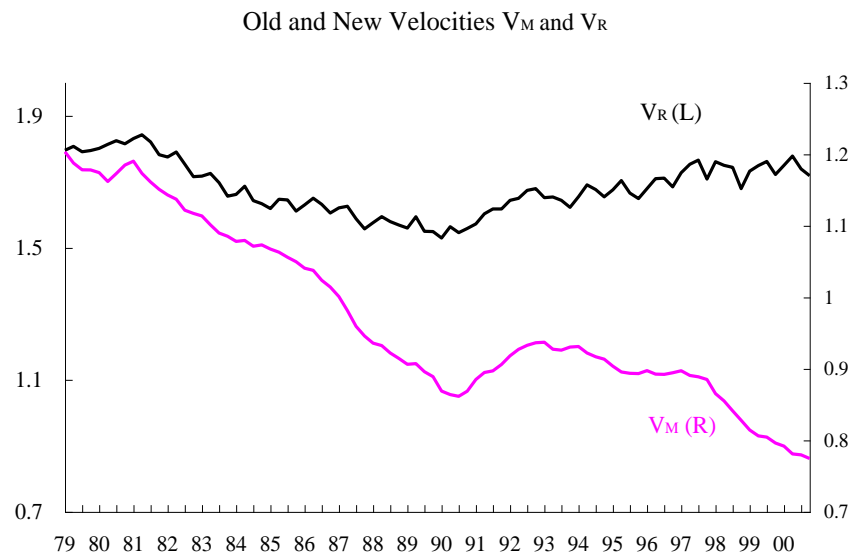
Financial credit determines asset prices –
leads to asset cycles and banking crises

The solution to the breakdown of the quantity relationship:

1. Money had been **defined wrongly**: The money supply (deposits) is created via credit creation, which defines effective purchasing power (Werner, 1992, 1997)
2. The assumption that the entire money supply is used for GDP transactions (the 'real economy') is **wrong**. In many countries the majority of credit creation is for non-GDP transactions.
3. Thus defining money supply as credit creation (C) and disaggregating it into the GDP and non-GDP transaction streams **solves the velocity decline puzzle** and restores a stable relationship between a monetary aggregate (credit for the real economy) and nominal GDP growth.
4. This underlines the importance of **quantities** in macroeconomics, which dominate prices when markets are quantity-rationed.

Explaining the 'Velocity Decline'

- $C = C_R + C_F$
- If credit for financial transactions rises, *cet. par.* the traditional definition of velocity ($V = PY/M$) will give the **illusion** of a velocity decline.
- The correctly defined velocity of real circulation remains constant/stable.

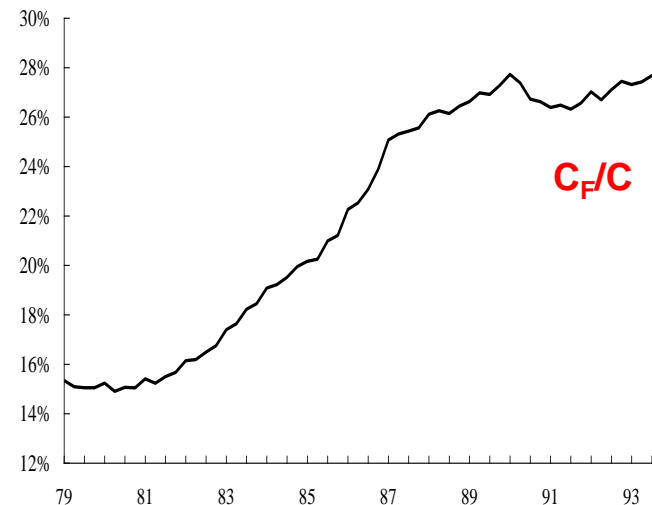


source: Cabinet Office, Government of Japan, Bank of Japan

1979Q1-2000Q4

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

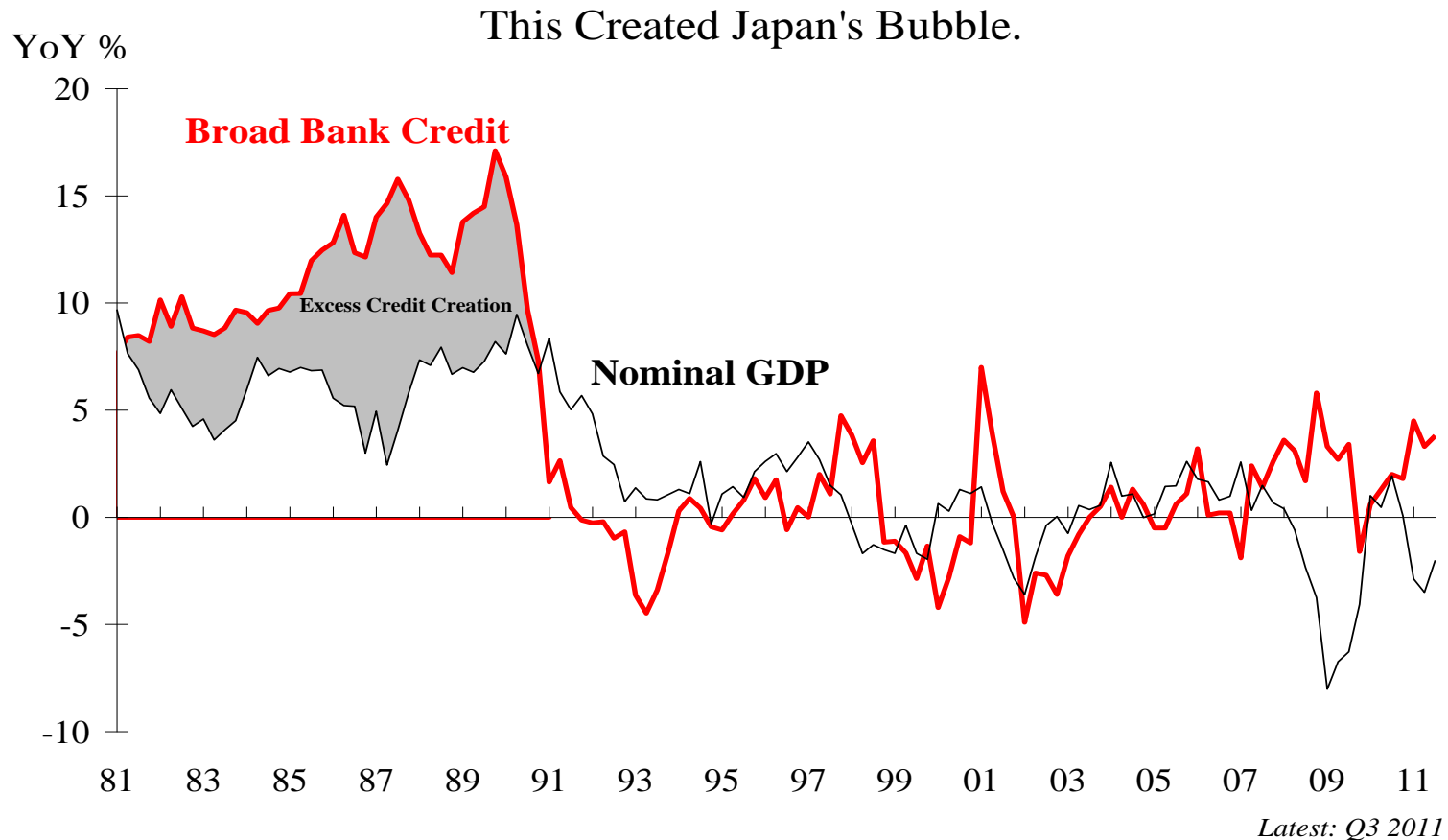


Source: Bank of Japan

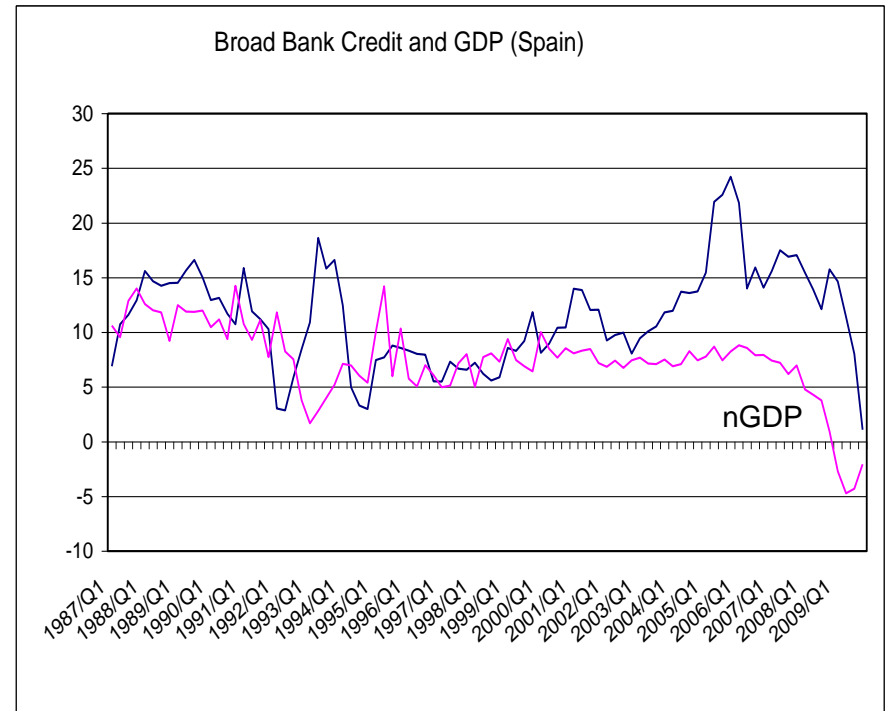
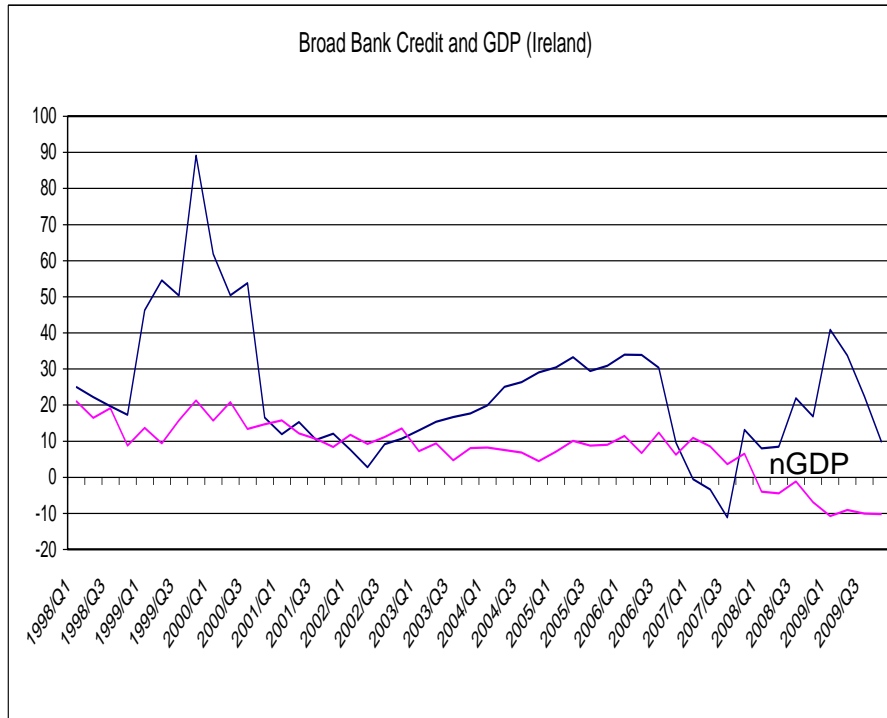
C_F/C = Share of loans to the real estate industry, construction companies and non-bank financial institutions

Rule:

Broad Bank Credit Growth > nGDP Growth = banking crisis



Rule:
Out-of-control C_F causes bubbles & crises (e.g. Ireland, Spain)



Broad Bank Credit Growth > nGDP Growth

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Is there a monetary policy tool that has an empirical track record of successful use to prevent asset bubbles and banking crises?

- **Fractional reserve requirements failed** to control the money supply, because they were based on the rejected fractional reserve theory.
- **Capital adequacy**-based bank regulation (Basel I, II, III etc.) also **failed**, because it is based on the rejected financial intermediation theory of banking. (Why? Banks can create their own capital – see Barclays)
- The only successful form of bank regulation in preventing banking crises is a policy based on the correct **credit creation** theory of banking: the policy of '**credit guidance**'.
- In all countries where this was deployed to prevent banking crises – by simply **restricting C_F** (credit for non-GDP, i.e. asset transactions) – it has been successful in preventing asset bubbles and the ensuing crises.

This is Why Central Banks Often Use Bank Credit to Manage the Economy

➤ **Case Study Japan 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:**

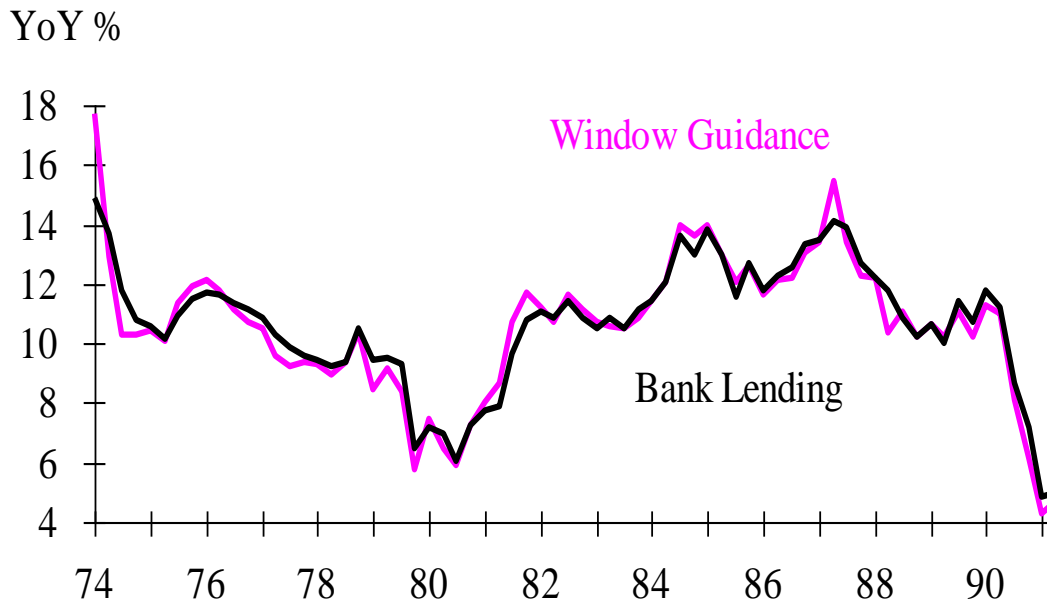
Official policy tools:

- | | |
|--|--------------|
| 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

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*
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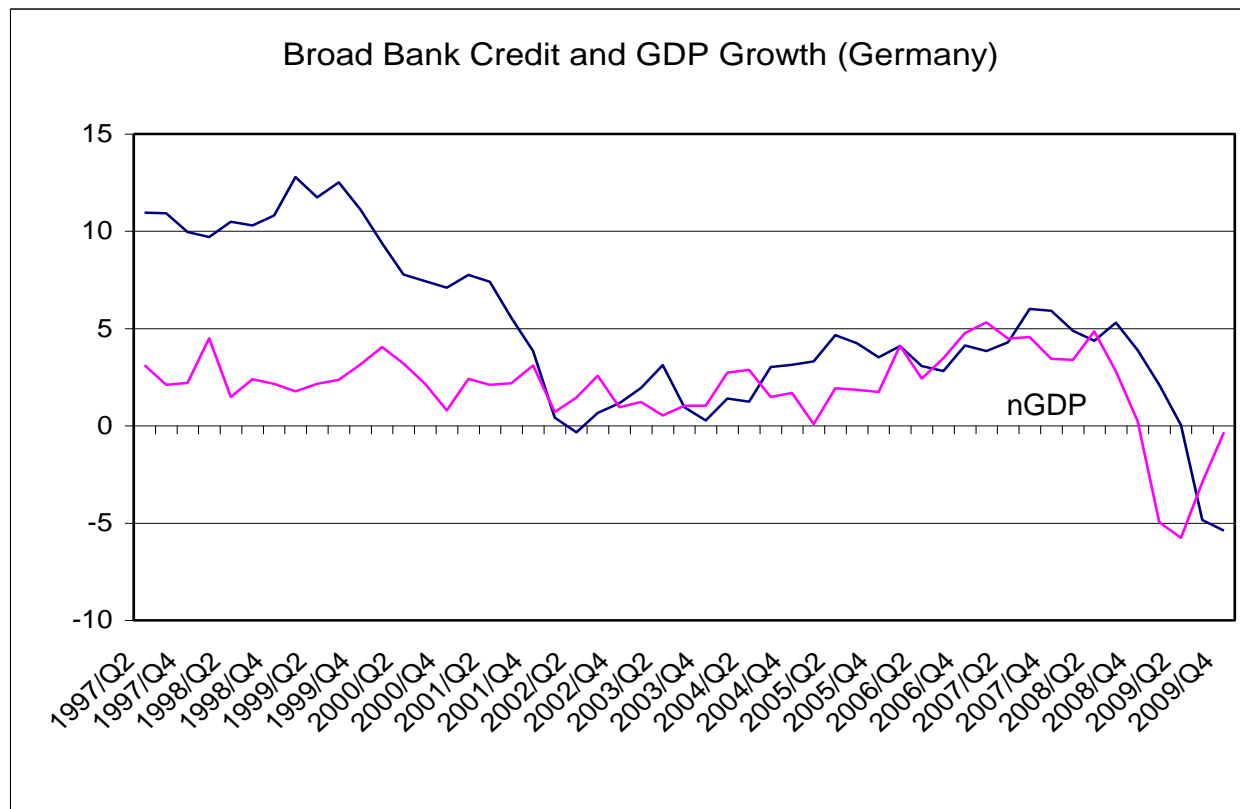
‘Informal guidance’ of bank credit by central banks

- The Bank of Japan is not the only central bank to ‘informally’ control bank credit.
- “Most industrialised countries outside of North America imposed direct controls over the volume of bank lending for some, often **most**, of the time from 1945 till the 1980s” (Goodhart, 1989b, p. 157).
- This practice is known world-wide, for instance, in
 - the UK as ‘moral suasion’
 - Germany as ‘Kreditplafondierung’
 - the US as ‘credit controls’
 - France as ‘encadrement du crédit’
 - Thailand as ‘credit planning scheme’
 - Korea, Taiwan, China as ‘window guidance’

Credit guidance to suppress unproductive (harmful) credit creation and encourage productive credit creation = the East Asian Economic Miracle Model

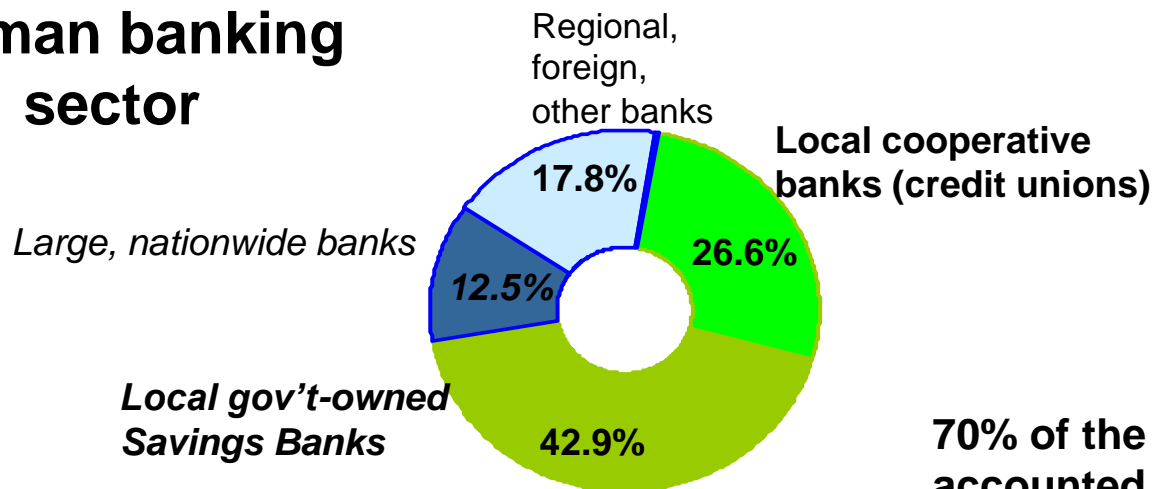
- Top-down determination of total credit creation (and thus nominal GDP growth) desired
- Allocated for **productive investments** via central bank and banking system.
- Implemented in Japan, Taiwan, Korea, China
- Partially implemented in Thailand, Malaysia, Singapore, Indonesia, India
- This is **not a planned economy**. It is simply a measure to restrict a dangerous tool (credit creation) so as to make it beneficial to the economy, and achieve high nominal and real GDP growth.

IV. The only alternative that has worked (with lower growth): Germany



Rule: A banking sector dominated by local, not-for-profit banks avoids asset bubbles and banking crises

German banking sector



70% of the banking sector is accounted for by hundreds of locally-controlled, small not-for-profit banks, lending mostly to productive SMEs

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 asset) transactions
- This is why we have had hundreds of banking crises since the 17th century (when modern banking started)

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I. Common Feature: The **deductive (hypothetico-axiomatic) research methodology** of equilibrium economics, the artificial separation of financial from real factors, excessive separation of research on finance/banking from macroeconomics, and from accounting and law. The alternative: The **inductive research methodology (common in the sciences)**.

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

(26)

不良債権問題
信用破壊招く
「国は、無償貸付と先中での融資の両方を行うべきだ」と主張する山本太郎議員は、昨秋の衆議院選で、野党第一党の日本共産党に所属する。山本議員は、信用保証制度の破綻を懸念する。信用保証制度は、銀行が貸付した資金が返済されない場合に、国が保証する制度だ。山本議員は、信用保証制度の破綻を懸念する。信用保証制度は、銀行が貸付した資金が返済されない場合に、国が保証する制度だ。山本議員は、信用保証制度の破綻を懸念する。信用保証制度は、銀行が貸付した資金が返済されない場合に、国が保証する制度だ。

V. How to Reflate after a Banking Crisis:

Re-ignite bank credit creation for GDP transactions to avoid credit crunch & deflation

- 1. Central bank purchases all **banks'** non-performing assets at face value, cleaning up bank balance sheets and allowing bank credit creation to rise.
 - Catch: In return banks are required to submit to 'window guidance' (This has been shown to be able to raise credit growth: Werner, 2005)
- 2. 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. Government stops the issuance of government bonds, borrows from banks:
Enhanced Debt Management

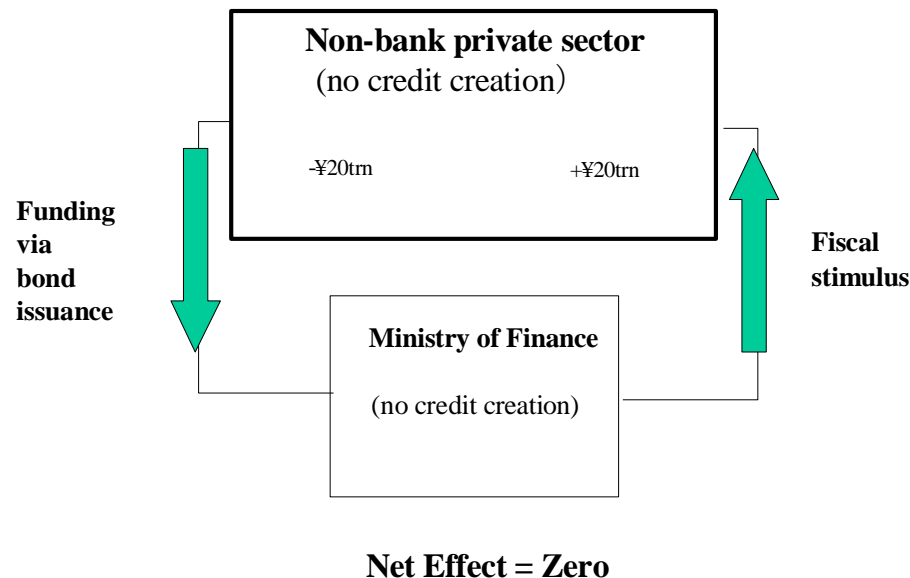
Enhanced Debt Management

- 97% of the money supply is created and allocated by private-sector profit-oriented enterprises, **the commercial banks**.
- **Government should raise 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**, while the central bank provides short-term liquidity.
- The prime rate in most eurozone countries is close to the banks' refinancing costs of 1% e.g. 3.5%.

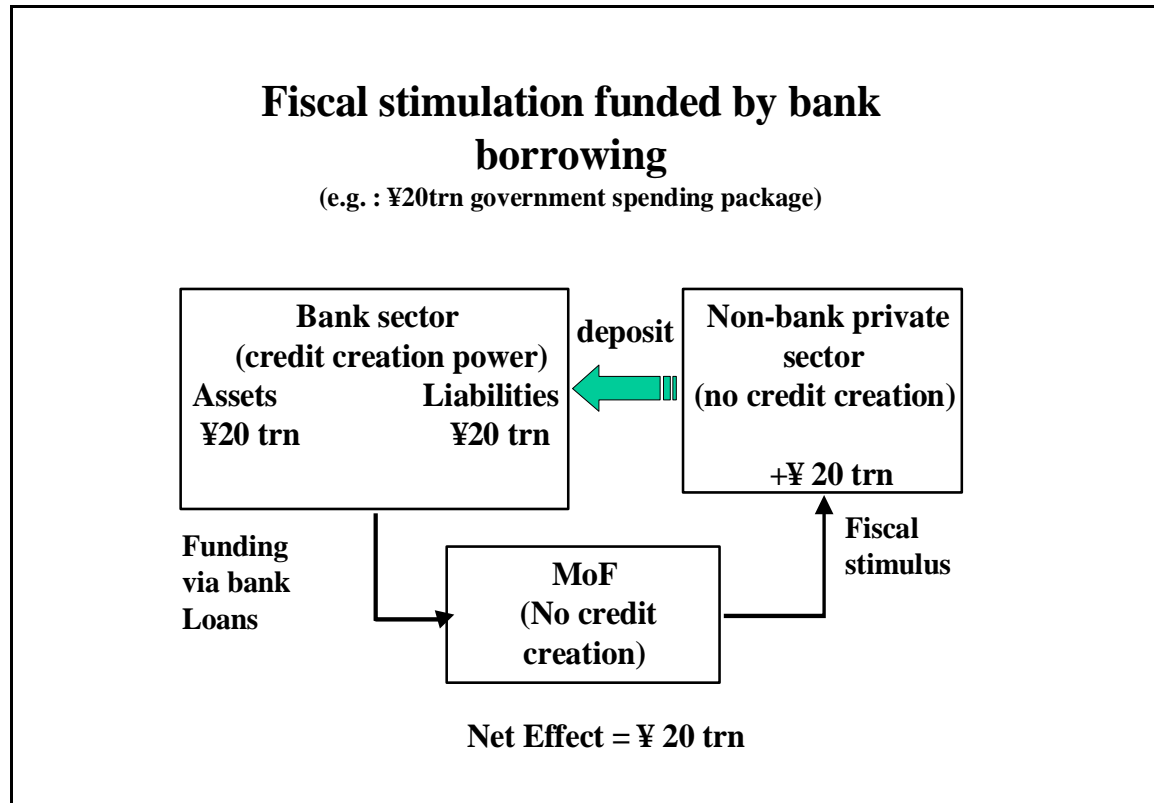
Why fiscal spending programmes alone are ineffective

Fiscal stimulation funded by bond issuance

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



How to Make Fiscal Policy Effective



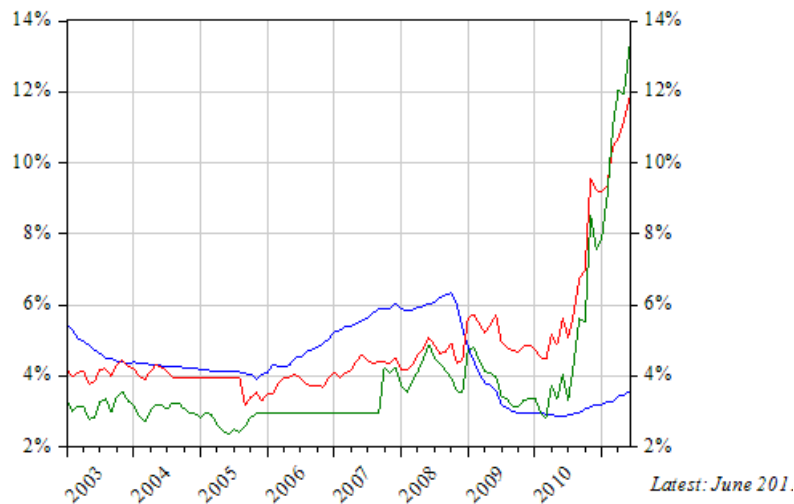
The solution that maintains the euro and avoids default Government borrowing from banks

Advantages of Enhanced Debt Management (EDM) to stimulate growth:

- No increased spending or government debt needed.
- Increased credit creation for the real economy (C_R), more money used for GDP-transactions, rise in corporate sales, employment and nominal GDP
- Increased tax revenues
- Falling 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)

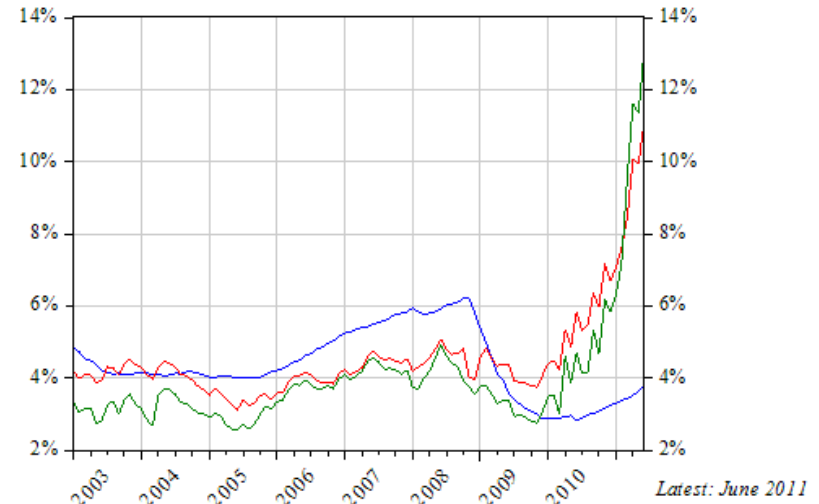
Prime Rate vs. Market Yield of Benchmark Bonds: Ireland

Portugal



— 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 (%)

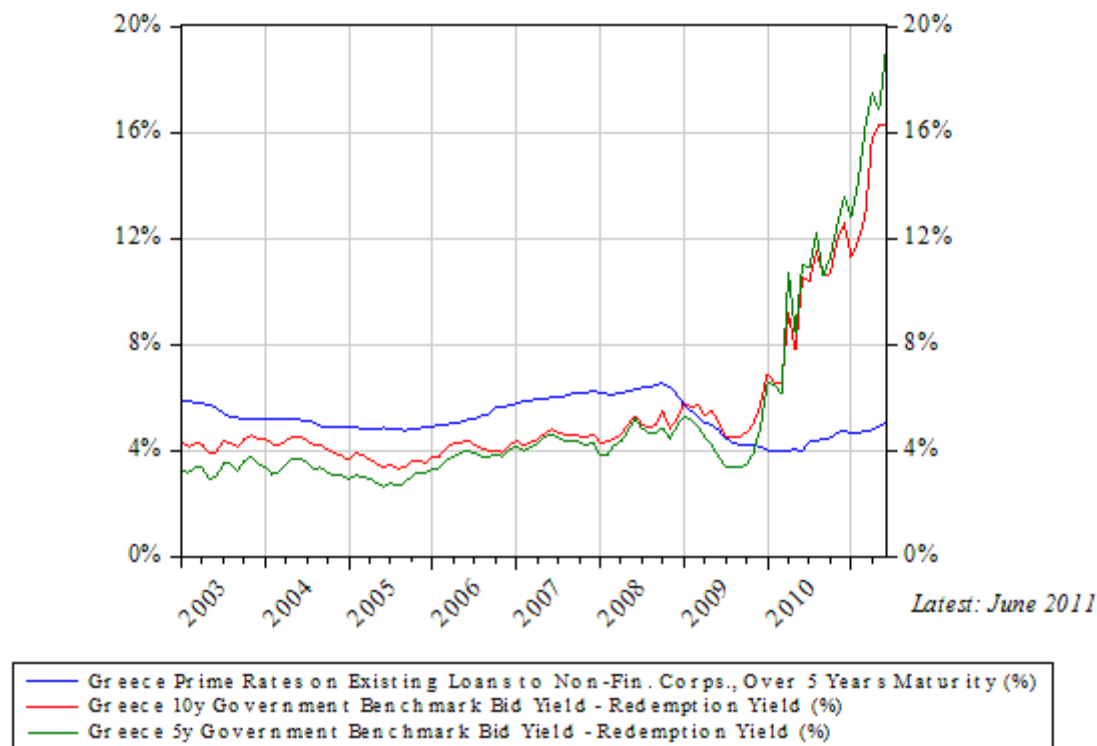
Source: Thomson Reuters Datastream, ECB



— Portugal 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

Advantages of this Proposal

- Eurozone governments remain zero risk borrowers according to the Basel capital adequacy framework: banks can create the credit/money out of nothing, without needing capital
- The ECB allowed banks to use their loan books as collateral
- **Instead of governments injecting money into banks, banks give money to governments.**
- **The measure is also necessary, because central banks have refused to bail out banks and have asked governments to fund bail-outs with tax payers' money, boosting national debt and bankrupting countries (Ireland, Portugal, Greece, Spain)**

Assessment of EDM by Prof. Charles Goodhart

- “Richard has proposed a new mechanism by which bank credit can be stimulated...
- It is a very interesting idea and do take it seriously, as it is well worth taking seriously.
- One could implement it, too, in the UK
- This approach undoubtedly would enable fuller monetary expansion, in essence allowing monetary policy [in the eurozone] to be brought back to the nation state...”

April 2013, International Conference on the Global Financial Crisis

Central Banks Can Prolong Recessions & Crises

Or they can *end them easily*, cheaply and quickly

Compare 2 major 20th century Japanese banking crises: post-1945 and post-1991

	1991	1945
% 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.
- UK 1914, Fed 2008

Some nagging questions

1. Has this analysis been conducted based purely on hindsight?
2. Were the actual policy responses to the crisis predictable, and wrong? (Fiscal bailouts and greater powers for central banks)
3. Is it too late to change things?

Was the financial crisis really unpredictable?

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

- “Greenspan’s Fed has been fuelling the flames with an 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... As individual wealth collapses, demand shrinks sharply. Bankruptcies will rise. Bad debts at banks will rise. Credit will shrink. Deflation will expand.”

What policies should **not** have been adopted?

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

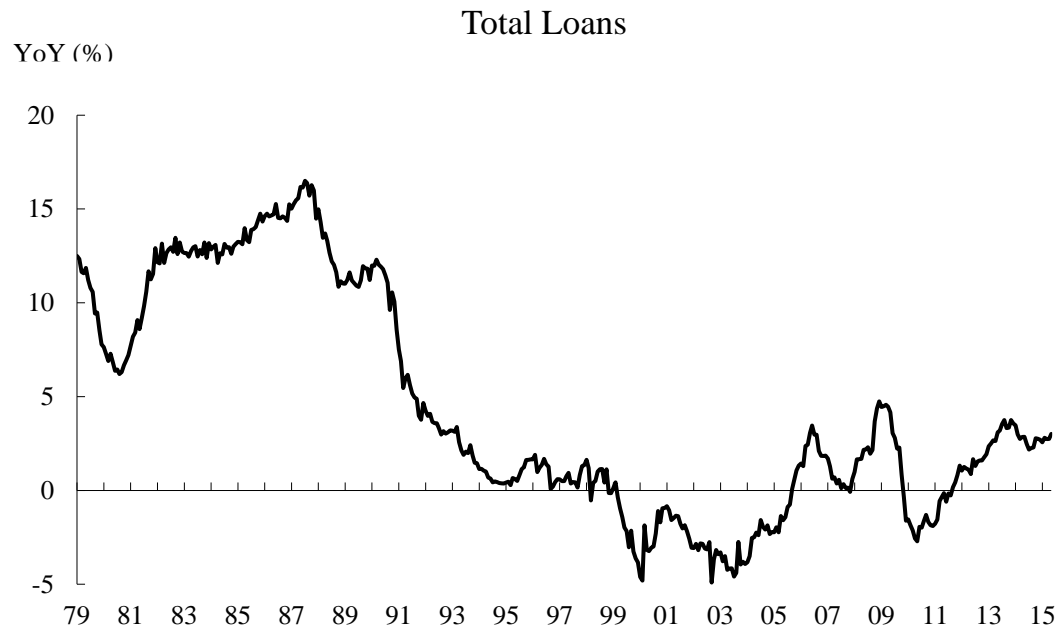
Fiscally-funded bank bailouts, creating massive fiscal deficits and government debt – and in the process nearly bankrupting states (Ireland, Spain etc.).

Greater powers for the central bankers: Regulatory moral hazard

Drawbacks of Central Bank Independence

- When I presented such policy proposals on how to create a recovery to Bank of Japan staff in 1993, I was told that they were **not interested in creating a recovery**. Instead, they wanted to use the recession to **push through structural reform**.
- **The Bank of Japan took until 2013 (20 years+) to do something about weak bank credit growth**

The Bank of Japan did not stimulate bank credit until 2013



Latest: May 2015

- Since 1992, bank credit growth had never exceeded 3% for a year or longer.
- This however is necessary for a sustainable recovery.
- More precisely, **bank credit for GDP transactions** (ideally credit 4 investment)

But Ben Bernanke Listened

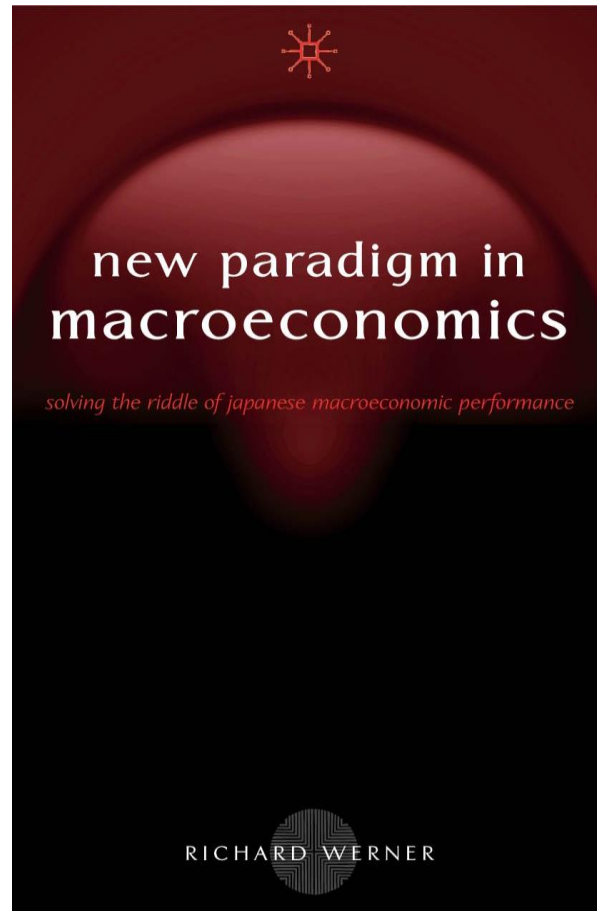
- In 2009, the former Fed chairman insisted he had **not adopted BoJ-style** 'Quantitative Easing' i.e. reserve expansion
- Instead, he was doing something else. He adopted parts of my **true QE policy advice**:
 1. The Fed purchased non-performing assets from banks, at high prices.
 2. The Fed purchased assets in the markets, massively increasing liquidity.
- Ben Bernanke called this '**credit easing**' – closer in name to my credit-creation based original QE.
- 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

How should the system be reformed?

- **Abolishing bank credit creation** powers and only using the central bank to create money and credit would **further centralise already too centralised decision-making structures**
- **Better:** make bank behaviour transparent, accountable & sustainable, by
 - **Banning bank credit for transactions that don't contribute to GDP** (asset transactions)
 - **creating a network of many small community banks**, lending for productive purposes and returning all gains to the community – creating real choice in banking.
- Competition in banking is only ensured if commercial banks are forced to compete against such community banks: see Germany

Moving towards action: Setting up Community Banks in the UK

- Goal: Introduction of public-benefit oriented, not-for-profit local community banks creating credit for productive purposes, mainly to SMEs
- Modelled on the German local public savings banks and local co-operative banks (Sparkasse, Volksbank)
- **Hampshire Community Bank** launch 2019.
- No bonus payments to staff, only ordinary, modest salaries
- Credit mainly to SMEs, and for housing construction (buy-to-build mortgages).
- Owned by a charity for the benefit of the people in the county of Hampshire, with half the votes in hands of investors (local authorities & universities)
- Next: establishment of such community banks in other cities across the UK and in other countries



Basingstoke: Palgrave Macmillan, 2005

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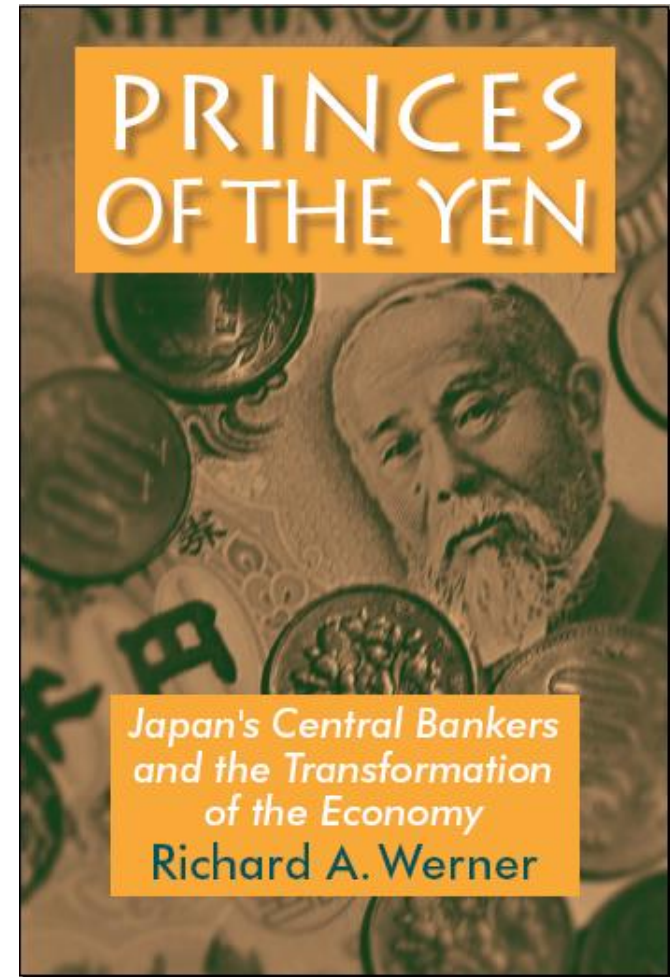
New Economics Foundation, 2012

Weitere Details:



München: Vahlen Verlag, 2007

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M. E. Sharpe, 2003